PRACTICAL HOME ECONOMICS

FOR TEACHING NUTRITION, FOOD, HYGIENE, CLOTHING, HOMEMAKING AND HEALTH.

WITH WHICH IS COMBINED HOME ECONOMICS NEWS

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Courtesy Taft Museum

The Sewing School at Katwijk

Josef Israels, who painted the above picture, was a Dutch artist (1824-1911). He is well known for his paintings of such intimate, homely scenes as this.

PRACTICAL HOME ECONOMICS

Vol. XV | October, 1937 | Number 10

Clothing Selection in a Liberal Arts College

By Gladys T. Pearcy

Hillsdale College
Hillsdale, Michigan

SOME clothing selection activities which have proved popular and helpful in the freshman clothing course at Hillsdale College are described here, in the hope that they may be useful in other schools.

Blouses

After reading the government bulletin "How to Buy Blouses and Dresses" and discussing its subject matter, each student brought to class one blouse which she considered to be an unsatisfactory purchase, and another which she thought to be a good investment. Each blouse was passed around the class for inspection, while the exhibitor explained its good and bad features.

In the varied assortment furnished, some had proved unsatisfactory because they had faded, some because they had torn under the arms, some because the tail was not long enough to stay inside the skirt, etc. Others had given satisfactory service because they embodied easy fit and expert workmanship, they were exactly suitable to wear with a certain suit, they were flattering in color and style, etc.

The different types of blouses which were brought for display led to consideration of suitable materials and styles for sports, general, and formal wear.

Footwear

We visited a local shoe store, where an obliging salesman explained and illustrated different types of shoe construction. He had read the chapters on shoes and hose in Brindze's "How to Spend Your Money" and the Sears and Roebuck leaflets on the same subjects, which the class had studied.

Welt, Littleway, McKay, hand-turned, Stitch-dorn, and Compo construction were described and evaluated, and examples were passed around the class. The salesman mentioned the greater ease with which welt shoes are repaired. He stressed the importance of buying children's shoes large enough, and the wisdom of consulting a foot specialist to correct foot ailments, rather than choosing corrective devices at random. Workmanship and material were discussed in relation to price.

Different weights and lengths of silk hose were shown in new colors. A lesson had already been given on types of construction and care of different types of hose.

Furs

After reading various references, including the excellent Marshall Field & Company bulletin on how to buy furs, the class studied a display of fur garments borrowed from friends of the college. They learned to identify common varieties and appreciate differences in quality, coloring, and matching of pelts.

The next day the class visited a fur tannery, work-shop, and store-room in a nearby town.

Standardized Garments

The class went through the Harvard Trouser Company factory to learn why some garments of standardized style, made in large quantities, by specialized labor, can be sold as cheaply as they can be made at home. The girls witnessed with interest the cutting out of one hundred thicknesses of material by an electrical cutting machine, and watched as if fascinated, the mechanical working of buttonholes at breakneck speed.

After this trip, the girls could easily understand why standardized garments such as pajamas, costume slips, and work aprons can often be bought as cheaply as they can be made.

Ensembles

The project which the class enjoyed most was the selection, in a local department store, of ensembles for college women. Later the ensembles chosen by the class were displayed in the large center show window with explanatory placards, which the store owner very kindly furnished.

The instructor visited the store twice in preparation for the class meeting to be held there: once, to discuss with the buyer and saleswoman the points to be emphasized in showing stock, and again, to help select the articles to be displayed to the class.

At the class meeting held in the ready-to-wear department, garments were shown illustrating guarantees of fiber such as pure dye silk, of color fastness, of non-crushability, of ability of knitted garments to hold their shape, etc. The value of the label of a reliable firm was mentioned.

The saleswoman pointed out deep seams for alteration, double stitching for reenforcement of seams, and excellence in outside stitching. She advised buying of garments which could be combined to make a number of different costumes. She showed blouses, hats, scarves, purses, gloves, and handkerchiefs to accompany the suits and dresses.

The class divided into three committees, each to select an ensemble, one for a blond, one for a dark blond, and one for a brunette. Each committee chose one of its own members to represent the type for that group.

No price restrictions were mentioned, except that the ensemble selected was to be of a type suitable for a student at Hillsdale College. Individual wardrobe

(Turn to page 390)

Josef Israels, who painted the above picture, was a Dutch artist (1824-1911). He is well known for his paintings of such intimate, homely scenes as this.

Demonstration Lessons for the Boys' Class

By Daisy Stackhouse
Damascus, Ohio

Goshen High School boys at work in their Home Economics class—all busy and all interested.

YES, we have already arrived at the place, in teaching a boys' class in home economics, where we begin to wonder new things we can do that will attract and command a boy's whole attention. When a group of young men come into the home economics room with eyes all a-twinkle and the air of expectation written on their faces, the teacher feels an unmistakable challenge.[1] Boys, even more than girls, crave activity. How to provide plenty of activity, yet at the same time, create an interest in worthwhile discussion is one of the problems of the home economics teacher. In trying to accomplish this two-fold aim, the following project was planned and carried out at Goshen High School, Damascus, Ohio. During the depression, one solution of laboratory problems was the giving of demonstrations by the teacher. In this case, the tables were reversed, the boys gave the demonstrations and not the teacher![2]

Several objectives were formulated for this course of lessons:

1. To summarize the foods work for the year. (Coming at the close of the year this type of lesson should enable a boy to utilize all the facts and techniques which he had learned).
2. To provide a proving ground to help boys locate their chosen vocation. (Some boys were interested in becoming chefs or demonstrators: this project might interest them in selling or advertising, food testing or research work.)
3. To help a boy acquire ease and grace in speaking before the public.
4. To provide an indirect means of teaching consumer education. (The writer's experience has been that the lessons have been most valuable when not definitely labeled "Consumer Research").
5. To help enrich a boy's personality.

Our school is a small consolidated one where home economics for boys was first introduced in January, 1936. This demonstration class was composed of fourteen boys, eight of whom had taken home economics from the beginning of the course which meant that at this time they were finishing one and one-half years of work. The boys were typical farm boys, large in stature and quite mature. Ten of the class were seniors and the remainder, sophomores. The pictures show the boys at work in the laboratory. About half of the time was spent in actual laboratory work, the remainder in recitation and discussion. At the end of the year the boys said that they enjoyed the discussions even more than the laboratory work! Quite some effort had been expended to make these discussions interesting and worthwhile, so that it seemed that a milestone had been reached when this feat was accomplished. Space does not permit the outline of work accomplished by this group. One basic text[3] was used but this was supplemented by many original projects. The following discussion concerns only one of these—demonstration of food products.

The approach to the unit was made by referring to the appeal of the advertisements of food products. Magazines were provided for class examination. One lesson period was spent discussing advertisements. (Consumer education may be deftly inserted at this point.) Radio programs were discussed, although these boys were not as familiar with most of the food programs as might be supposed, since they were usually at work on the farm at the time these programs were broadcast.

The assignment was that each boy select a subject for his demonstration and then after the required preparation, pretend he was demonstrating in front of the managers of some of these large food concerns. If he succeeded, perhaps he might secure an imaginary position as demonstrator. This of course demanded that the boy exercise all his charm and personality and provided an excellent chance to use lessons learned in a recent "Personality" unit.

Lists of suggested demonstrations were submitted by the teacher to give the boys some help in selecting their own. Originality was stressed as being of prime importance in commercial work so most of the boys figured out their own ideas. The following outline was given them to follow in writing out their demonstration before the actual practice lesson:

NAME OF DEMONSTRATION

1. Name of product or products you are demonstrating.
2. Aim of demonstration. What are you going to prove or "sell"?
3. Recipe and directions.
4. List of utensils required.
5. Time budget. You have 45 minutes for introduction, preparation, cooking process, discussion and generalizations, and "cleaning up". (The latter may have to be completed during the next period.)
6. Outline of talk to be given during demonstration.
7. List of references used.
8. Cost of demonstration.
9. Grocery order.

Actual preparation of this paper was done during class time. All references were assembled in this one room. The teacher worked with individual students, checking each paper, offering suggestions, helping find references and answering questions. Figuring costs in many instances required actual measuring of supplies as well as consulting grocery lists. (This, by the way, prepares a man to appreciate some of the problems of the housewife.)

A typed set of rules for demonstrating was given each boy. They were as follows:

[1] Henrietta K. Straub, Chairman, "Report of the Committee on Home Economics for Boys", *The Journal of Home Economics*, Vol. 28, No. 8, 1936, p. 539.

[2] Edna Von Berge, "Pupil Demonstration Solves a Problem", *Practical Home Economics*, Vol. XV, No. 7, (July), 1937, pp. 240, 260.

[3] Burnham, Jones, and Redford, *"The Boy and His Daily Living"*, The J. B. Lippincott Co., Chicago, Illinois, 1935, 363 pp.

Dick Keeler demonstrates mixing Angel Food cake.

Three types of baking powder were used in this demonstration.

Demonstrating Rules.

1. Each boy must wear a clean apron, cap, and white shirt.
2. One's appearance must be immaculate. This means hair combed, face, neck and ears clean. Hands should be scrubbed and nails cleaned.
3. Each demonstrator may select one boy for his assistant.
4. Check all supplies to see that they are at hand when you begin your demonstration. Flour should be previously sifted. Materials may be measured in cups before the demonstration provided the materials remain in the cups to show amounts. All mixing should be done in front of the audience. When using materials previously measured, be sure to repeat to the audience, "Now I am adding one cup of butter which I have measured here." It makes a clearer demonstration.
5. Have the recipe written plainly in front of you while you are working; for the benefit of the audience it is well to have it on the blackboard where they can also see it and follow you as you work.
6. Begin your demonstration by introducing your assistant and yourself. Give the title of your demonstration and explain what you aim to do.
7. Have your materials assembled on trays. Lay all used utensils on a tray.
8. Every utensil, spoon, towel, hot pad, etc., must be laid out in order before you begin. You will be judged on the neatness of your table while you work as well as upon the actual demonstration. These supplies should be all arranged so that your demonstration may start as soon as your class convenes.
9. The main demonstrator *must talk the entire time he is working.* He is responsible for all the speech. The assistant is there to hand utensils to him as needed, to keep the table cleared and to start washing dishes while the demonstrator is finishing his talk and conducting discussion. The best demonstrator will be the one who can both talk and work at the same time. This will necessitate your being very familiar with the text of your demonstration, in other words you will have to know what you are talking about!
10. After you have finished actually demonstrating the manipulation and have your product in the oven (if it is to be baked), then proceed to tell the audience all the good points you know about this product. Pretend that you are actually selling it to them and that you are earning your salary by this demonstration. (Of course in this case your grade will be your salary.)
11. At the end of the demonstration ask if there are any questions. If you are unable to answer a question, say that you do not know the answer but that you will be glad to look it up and report the answer the next day. (And be sure you keep your word.)
12. Remember—*all directions must be clearly given!* Speak clearly enough so that even a deaf person could hear.
13. Each group will be required to clean up and put all utensils back in place after their demonstration.
14. If it is possible to serve small portions to the audience, do so at the end of the period. If the baking period is not finished, serve it the next day so that the class will be able to see and judge results. Of course one element of a good demonstration is producing a perfect product. We must not forget the taste as well as the eye appeal.

Biscuits made with a ready mixed flour.

During these demonstrations the audience will be graded each day the same as the demonstrator. You (as audience) will be given blank sheets at the beginning of each demonstration and asked to write down the following:

1. Criticisms—give all the good points of the demonstration first, then list the corrections which you think are needed for improvement.
2. Three worthwhile questions on the demonstrations. Use your originality as you will be graded on that. These questions may be asked orally at the discussion period. Ask intelligent questions which will put the demonstrator "on his toes".
3. What did you like best about the demonstration and why?

The next step in preparation for these demonstrations was an actual demonstration by the instructor, bringing out the points listed in the previous outline. She selected an assistant from the class and proceeded to do it as she expected the class to do.

Since some of the boys were attempting to demonstrate the preparation of foods they had not previously prepared, some laboratory practice periods had to be arranged. Two days were given over

And here are home-made biscuits.

to this after the papers were written. Of course it meant that every one was working on something different at the same time, but each boy was busy and absorbed in his own problem. One day was devoted to assembling supplies and getting ready, the second day was used for actual preparation of the product. In addition to this class practice, several of the boys practiced at home.

The following list represents the titles of the demonstrations chosen by these boys:

1. Comparison of time, cost, and quality of home made biscuits versus the use of a commercial prepared biscuit mix.[4]
2. Effect of too much beating and wrong mixing procedure on the texture of muffins.
3. How to use the electric mixer successfully. The mixing of a butter cake.
4. Comparisons of three common brands of baking powder; make three Gold cakes, all ingredients except baking powder remaining the same. Bake at the same oven temperature.
5. How to make an Angel Food cake successfully using the stroke method.[5]
6. How to make good cherry pies.
7. Two methods of mixing a butter cake. Compare time and quality.
8. How to prepare an attractive and well balanced "packed" lunch for a high school boy.
9. How to bake oatmeal drop cookies.
10. How to make an attractive peach omlet.
11. How to make creamy fudge.

Some of these demonstrations involved more time in preparation both beforehand and during the actual class demonstration; in such cases the boys were permitted to work on one demonstration. Although no brand names are used in the above list, each demonstration was based around the commercial product which each boy selected in order that he might pretend he was selling that product. This introduced a little salesmanship into the project which helped to enliven and create interest in the demonstrations. It is realized that in some schools this might be considered objectionable. As used in this particular instance, it was a form of consumer education in which the author and students were trying to discover with common household methods which brands seemed to produce the best results for the money. The actual results are not given here for various reasons. Some results were so obvious, however, that certain brands appeared to be better "buys" than others.

Using actual commercial names and seeing results which disclosed differences in products helped create a scientific attitude in the minds of the boys. They have developed a sense of "consumer-mindedness". Before the demonstrations were over their questions in discussion showed very definitely this trend. Such questions as: "Why would you buy this particular brand? What is the actual difference? Is it worth the variation in price? Can you depend upon your results?", seemed to indicate that the boys had started to think and weigh these matters before buying.

The boys did their own summarizing at the end of each demonstration. It was amazing to hear the questions the other students asked the demonstrator. The audience spared no pains in seeing that each demonstrator was "put on the spot" to see if he had really learned the facts necessary for him to know about his demonstration. Since most of these boys had previously had chemistry, all sorts of questions were asked concerning chemical reactions taking place in these products. One boy came for help the day of his demonstration. "I've got to know my stuff on these vitamins today, because I know those fellows are laying for me; they are going to ask all kinds of questions to see if they can get me mixed up. Believe me, I am going to be prepared!" And he was! Such stimulus as that is better than a teacher can give.

As a result of these class demonstrations several of the boys were asked to do some public demonstrating. Four boys were invited to Youngstown (Ohio) to demonstrate in front of three hundred WPA women at their WPA Institute. (A large number of these women were employed in school lunch rooms and were excellent cooks.) Most people might feel a little "fussed" in a case of this kind, but not these boys. They deftly tossed their biscuits, pies and cakes together in front of these women who had baked for years and did not mind in the least the fact that they had only a tin oven on a gas plate in which to bake their products! One boy insisted that he could tell if his pie crust would be good by the "feel" and passed around samples of his dough for them to feel. It might be said the teacher probably had a higher temperature than the ovens since she feared for results with the inadequate equipment, but not the boys! Their faith seemed to be justified for their products appeared baked "to a turn" and after being sampled received the stamp of approval from all who tasted.

A neighboring home economics club at a nearby school requested a couple of demonstrations. Two other boys were selected and demonstrated how to make cookies and how to make an Angel Food cake. Another boy was offered a steady position in a bakery as a result of his demonstration. These were some of the material achievements of this project.

Other results were noted; these public appearances gave the boys who were interested in this type of work a chance to actually experience a taste of it and decide whether they wanted to follow it as a vocation. It also offered a splendid opportunity to help accomplish another of the original aims of this project—that of acquiring ease and grace in speaking before the public. It gave the boys a chance to improve their personalities. One interesting example was the self confidence instilled in one boy by this particular project. He had a slight speech defect which resulted from nervousness and embarrassment when he spoke before a group. A little special help and encouragement was given by the teacher. In the end, the class voted that he had given the best demonstration of the entire group. The boys were cognizant of his difficulty, which he had worked hard to surmount, and were loud in their praise of his success. He was one who was chosen to repeat his demonstration for the neighboring club. His recent success inspired him to the point that he was again able to repeat the performance with no difficulty. As a result he appears to have entirely overcome the speech defect and is able to converse with ease even among strangers. Was it worth while to relieve the emotional strain of this one boy?

At a recent educational meeting a well known educator (a man, as you will note by the remarks), made the statement that home economics for boys had no place in the modern high school curriculum. He could see benefits only to those boys who were expecting to become chefs. In the light of these remarks, the teacher must analyze the results of this project. Did these boys learn only those things which they could have secured in any of their regular classes? Was this project a waste of time?[6] If the boys were permitted to answer, there would be a resounding chorus of "noes." Fretwell[7] has made the following statement:

> "The real purpose of education is to enable the individual to become increasingly, intelligently self directive."

After all the purpose back of the plan of these demonstrations was to enable each boy to become *"increasingly, intelligently self-directive"*. It is true these boys might have received a "smattering" of food knowledge in their biology, but have any of you ever seen a boy taking a course in biology attacking vitamins with the vim and interest mentioned in the example previously? Do you think this boy might happen to remember the knowledge acquired here any longer than that acquired in the lack-a-daisical fashion often noted in biology classes? Oral compositions are given in English courses but is it not much easier to avoid self-consciousness by telling how to do a certain process, by actually demonstrating and talking at the same time? What about the consumer knowledge and the scientific attitude acquired through this project and its effect on future family life of these boys?

[4] One of the common well known brands on the market was used.

[5] Recipe developed by Phoebe Jane Huff at Ohio State University, School of Home Economics.

[6] This project required one month of time, class periods forty-five minutes long with an equal amount spent outside of class preparation.

[7] Elbert K. Fretwell, *"Extra-Curricular Activities in Secondary Schools"*, Houghton Mifflin Company, New York, 1931, p. 2.

Home Arts in the Integrated Program in the Elementary Schools

By Irene Meves

Helen L. Tryon

Yonkers, New York

DUE to the trend of modern education toward the activity program, the home arts teacher in the elementary schools today is facing the need of drastic changes in her own methods. She no longer gives a series of lessons which have no connection with any other branches of the curriculum, but rather helps to enrich the units or experiences which the grade teacher is developing in the classroom. She must make her program so vitally a part of the school life and so interwoven with all subject matter as to prove that the information, attitudes and experiences gained therein are those which actually function in life. In the intergrated program home arts is not confined to the fifth and sixth grades but is given in all classes from the kindergarten through the sixth whenever the classroom teacher feels that some work in this field will better develop the unit on which the class is working.

In order that the home arts teacher may give intelligent assistance in planning the home life content in all the grades she must be a consultant as well as a teacher. Her first duty is to find out by visits to the classroom and conferences with the classroom teacher what units are being developed. Then together they plan a lesson or series of lessons which will have a particular meaning to the child because of their direct connection with the project under consideration at that time.

In Westchester County a committee has been studying home arts in the integrated program. In order to determine what units were being carried on within the classrooms, a questionnaire was sent to the teachers in the elementary schools in various types of communities throughout the county. Although a great variety of units was reported, a careful analysis showed that the activities centered around the following major interests: community life, home life in many lands, home life of earlier times, and special occasions and holidays. Home arts has a definite contribution to make in the enriching of each of these units.

The transition from the old methods to the integrated program was of necessity gradual. While home arts work was still confined to the upper grades some of the classroom teachers saw the possibilities of enriching their program by home arts activities. A specific instance might serve to illustrate the trend toward integration. One sixth grade had been making a study of Europe. As a culmination of this activity they planned and prepared a European party to which their mothers were invited. Foods typical of each country that had been studied were prepared and displayed at separate tables, for example, Scotch scones, tea made in a real Russian samovar, Dutch cheeses, etc. As each guest arrived she was given a tray and invited to walk around to each of the tables and sample anything that looked inviting. In addition an exhibit of foods imported from various countries was loaned by a local grocer. In connection with this study the children had dressed standpatter dolls in native costume.

The success of this unit was a source of inspiration to the teachers of the lower grades. Gradually they began to ask the home arts teacher to assist them in developing their units. In some cases the work was carried on in the classroom and required only a lesson or two. A second grade was working on a transportation unit. Having completed their sailboats under the direction of the industrial arts teacher the children wrote notes to the home arts teacher requesting that she come to their room and help them to make their sails.

On another occasion a little first grade was faced with a very grave problem. One of their members, a little boy, was spoiling their punctuality record. Upon investigation they learned that the reason for his tardiness was his dislike for cereal and the insistence of his mother that he eat the cereal before leaving for school. At this point the cooperation of the home arts teacher was sought in suggesting a remedy. The class was invited to the foods laboratory for a cereal party. After they had put their cereal on to cook, the children discussed informally why they should eat cereal. Then they all sampled their cereal and they scraped their dishes clean! Evidently the party was a success for once more the punctuality record was unmarred.

Under the old set-up home arts reached the girls only and was usually designated as Foods and Clothing. Definite projects were planned by the teacher and every pupil was expected to complete the prescribed object regardless of her interests or needs. The traditional "cooking cap and apron" made a good starting point for the clothing work, while cooking a model breakfast was the usual approach to the study of foods. In the integrated program boys and girls alike share in the planning and carrying out of the activities. Because they share in the planning and because there is a definite connection with their major interest, the home arts take on an added meaning. Often the work is done in committees which the children themselves organize. Each committee chooses its own chairman who is responsible for seeing that its share of the project is carried through to completion. This develops not only the ability to organize but also the ability to lead.

The newer home arts is much broader in scope and involves a great variety of activities. Weaving, tie-dyeing, candle making, house furnishing, costumes of other countries, Indian bead work, hooked rugs, rag rugs and basketry are frequently included. Boys and girls work together in groups in carrying out these home activities. No longer do the boys feel that they are "sissies" when they are called upon to wash dishes or sew. They cooperate with the girls without any trace of embarrassment or nonsense, but rather regard their work together as a normal situation.

One of the chief difficulties confronting the home arts teacher in planning an integrated program is the attitude of the administrators. They frequently fail to see that in this type of program it is impractical to schedule definite classes for regular periods. The time allotment must vary with the particular unit which is being developed and with the age of the pupils. In some cases the activity might require the assistance of the home arts teacher for several consecutive lessons, in other cases she may act chiefly as adviser to the grade teacher, supplying her with appropriate materials, suggesting activities or perhaps directing the first lesson. Flexibility of program is absolutely essential. The home arts teacher must be available when the activity has progressed to the point where her services are needed. It is not possible to

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The Story of Lighting

By Estelle H. Ries

New York City

Persian cressets or flares.
Photograph from N. Y. Public Library

LIFE in its simpler forms had only a camp-fire and a torch to prolong the dying light of day. When we stop to consider what our evenings would be with only these, it at once becomes apparent that we would have to revert to the primitive existence of barbarians. We would have to eliminate all activity after sundown, shrink our day to about twelve hours instead of seventeen or eighteen, and cut off about a third of life in so doing. Thus while night light does not necessarily make us live longer, it enables us to live more widely and deeply.

Fire was the first night light. We can imagine primitive man watching it, absorbed, entranced, as we are even today. How much more so would he be when the experience was utterly new and without precedent! As that memorable night fell, he continued to watch the fire, not noticing the dusk.

Suddenly he found it dark, yet light; light in a new way—light by means of fire!

Time passed. Then some genius of that prehistoric time snatched a firebrand from the flames and used it to light his way in the darkness. Thus came into being the torch which for centuries remained the sole means of night lighting. The light of sun or moon, the flare of the volcano, the flash of lightning man accepted. He could not change them. But now! Here was something he could achieve for himself, when and where he wanted it! The thrill he had of this must have been beyond our most vivid conception.

Much as man doubtless enjoyed the warmth of fire, it is probable that its lighting quality was even more important. People unaccustomed to domestic comfort, nomads with little in the way of clothes, were hardened to climatic conditions. Hot or cold, it made not so much difference. But there was naturally a fear of the night. Then came prowling creatures, weird sounds, unseen things of mystery. The conquest of night must have been hailed as a real achievement. Here were real protection and companionship.

From N. Y. Public Library

An elaborate iron oil lamp of the early Roman empire found near Paris.

(Left) A brass camphene lamp, a tiny whale oil lamp and an extinguisher, examples of early styles of lamps before glass chimneys came into existence.

(From the Metropolitan Museum of Art)

We do not know just when the ancient lamp was invented in the form of a vessel filled with oil into which some kind of wick was dipped, but its invention certainly antedated the present era by several centuries. And once this smoky, foul-smelling lamp had been discovered, it remained in use practically without change or improvement, until the end of the twelfth century, the date of the invention of the modern candle.

Nowadays when even gas jets and kerosene lamps are considered obsolete, that ineffective form of illuminant, the candle, seems about the most primitive type of lighting equipment. Oddly, however, the modern candle was a relatively late invention, due probably to the fact that tallow was its chief ingredient and this was only available after cattle were domesticated. Even then, the fat was also good to eat in suet pudding, and food was not so plentiful that this important use could be minimized. Then too, in warm climates suet or beef fat became too soft to be satisfactory in candle form. In ancient palaces and temples, candles did exist that were made of bees wax, but because it was so laboriously gathered by the bees, and was costly, it was considered sacred and was generally reserved for ceremonial uses such as weddings, funerals and other temple functions.

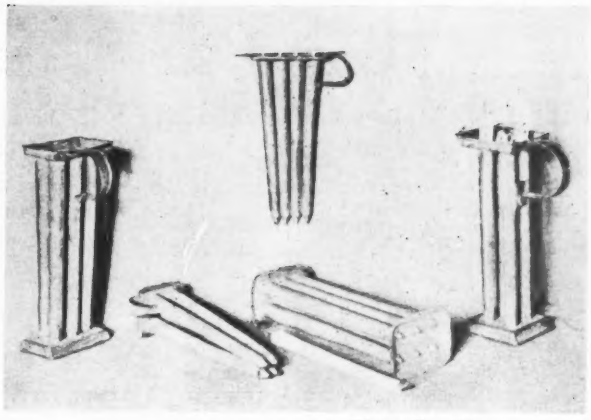
In Colonial America candles were not a luxury or an aspect of interior decoration; they were the only available source of light after dusk. Part of every housewife's duty was the dipping of candles, and every attic or workroom had its tallow vats and candle racks. Today we regard candle moulds as museum pieces, yet there are parts of our country even yet where candle making is still part of household routine. Benjamin Franklin must have had a hard time with his lighting arrangements in those days. A candlemaker as a boy, he undoubtedly had the best in candles as a man. But he drew lightning from the skies to popularize electricity. He invented bifocal glasses

to improve his vision in ill-lighted days. He had to practice "early to bed and early to rise," to make the most of natural light.

During the Middle Ages Europe initiated almost no advances in lighting over the ancients. The great feudal castles which by day were gloomy enough, were far worse after nightfall. The only means of illumination were the smoky and foul-smelling tallow candles and the flambeaux or torches that were employed to make a greater light for banquets and other social events. But the light they gave was minimum and the smell was maximum. They were not only disagreeable but ineffectual as well. Fires flourished, many of them making great havoc. One such befell Sir Isaac Newton. After the publication of his book setting forth the law of gravitation, Newton was working at chemistry but all his labors were lost by an unfortunate accident. One morning he went to church leaving a lighted candle among the papers on his desk. It is said that his pet dog, "Diamond," upset the candle. When the astronomer came home he found all his papers destroyed. His health was impaired by the accident, and though only fifty years old, he made no new discoveries in the last thirty-four years of his life. This tragedy, due to the imperfections of candle-lighting, took place as late as 1687.

Only in the 18th century did a Frenchman, experimenting with a glass tube held over a lamp flame, find that he could regulate the supply of air so as to obtain a practically smokeless flame. His name was Argand, and Argand lamps were born. A great deal of experimenting had to be done in the designing of suitable burners, wicks, and glass chimneys, and extensive testing for suitable luminating fats and oils. The best of the oils tried out proved to be whale oil, and in America a great industry grew up to supply the demand. Whaling became very profitable, as much as $4,000 being paid for the oil obtained from the blubber of one whale. Mineral oils began to take the place of whale oils about 1859, putting an end to the colorful era of Herman Melville's romances of the whaling ships.

Early in the 19th century arose an important step in advance of all previous lighting expedients—the discovery of illuminating gas. First investigated in Glasgow, centers were soon established on two continents for its exploitation. At the outset, suffocations, explosions, asphyxiations, and other ills occurred. It was not easy to adjust to gas. But finally the housewife could bid farewell to the candle-grease that had dropped on clothing, stained the carpets, spotted the furniture, flavored the food and made itself a general plague, to say nothing of the meagerness of the light it afforded that could not but overstrain the eyes. Now, however, it seemed that the world was ready for real light, and quickly on the heels of gas came the development of electricity. Electric lights are so familiar today that it is all but impossible for us to realize what an amazing source of wonder they were when first installed on a trial basis, and that only a comparatively few years ago. "It seemed almost like writing by daylight to have a light without a particle of flicker and with scarcely any heat to make the head ache," said *The New York Times.*



(Metropolitan Museum of Art)

A group of tin candle moulds such as might have been found in most Colonial American homes when candles were the common method of lighting.

It is only when we come up against a situation where we have to revert to candles or oil-lamps that we realize completely the progress made.

We do not always recognize the invaluable contribution of glass to the art of successful lighting. Without it the use of electricity for this purpose would be impossible. Lighting previous to the use of glass was attended by grave dangers, horrid odors, soot and smoke, and for all that, was anything but satisfactory as light. It was dim, unsteady, and apt to go out at just the wrong moment, or perhaps explode.

The coming of gas light and electricity not only greatly improved interior illumination but made possible the policing of the towns and the increased safety to property and life. The modern officer on his beat succeeded the old watchman carrying his horn lanthorn, calling out the hours and preserving the peace. In fact, it was not until the middle and late 1800's after the coming of gas, that street-light-

(Turn to page 387)

American oil lamps dating from 1830-1860 *(Courtesy The Magazine Antiques)*

"I See"

A Home Economist Reviews Modern Visual Teaching Aids

By Anna M. Becchetti

Hibbing, Minnesota

HOME economics departments have been called the "dumping ground" for commercial illustrative material of all kinds. In a sense, we deserve this unpleasant terminology. There is a magical sound in the word *free* to most people and home economists are no exception. Homemaking departments can prove to be happy hunting fields for the business firm seeking a loophole for cheap advertising of its products and willing to exploit both pupil and teacher in its eagerness for self-perpetuation.

Does this mean, then, that all commercial visual aids should be shunned as one would a dreadful monster? Certainly not. This negativistic course would prove very detrimental to the progressive homemaking teacher. The above statements are merely intended to serve as a warning. With a consciousness of the pitfalls of blind acceptance as a starting point, the intelligent instructor can utilize such teaching aids fearlessly, and receive fullest possible benefit from them.

Critical analysis and careful evaluation should serve as beacon lights when selecting and presenting illustrative materials. We should ask ourselves:

1. Does the material presented illustrate the points we are seeking to emphasize?
2. Could this be taught better by some other method?
3. Is the *quality* of the visual aid the very highest possible?
4. Has a good method of presentation been used?
   a. Were the pupils properly prepared for the presentation?
   b. How skillfully was the material introduced?
   c. Was a conclusion or summary possible?
5. Is the material accurate?
6. Is the material up to date?

Good teaching aids are obtainable for nothing or a nominal cost from a variety of sources. Because of the magnitude of homemaking education, there are numberless subject elements which bear relationship to it in varying degrees.

We all realize the effectiveness of the conventional demonstration method for teaching certain phases of home economics, because of our actual experiences.

But do we fully appreciate the extent to which other visual aids may be used, either independently or as supplementary material. No *progressive* educator can afford to ignore the significance (as proven by experiments and studies) of visual teaching aids as factors in pupil motivation and retention of knowledge.

The basic idea behind the use of visual aids is the defeat of verbalism. By introducing concrete teaching materials as the basis of experience, the ultimate objective of modern pedagogy—the development of meaningful generalizations and insights—is approached. The ancient oriental conviction that one picture is worth a thousand words is a wise one.

For example, the most barren way of attempting to teach a girl to make cake would be to have her read the chapter on cake-making in a book devoid of illustrations. The most fruitful method would probably be a cake-making demonstration by the instructor followed by actual cake-making experience on the part of the pupil and supplemented by readings, discussions, etc.*

The value of the objects used in an actual demonstration is fourfold:

1. It brings the pupil in direct contact with the actual objects.
2. It offers the interest element through handling or touch.
3. It makes printed symbols meaningful.
4. It stimulates further investigation on the part of the pupils.

If a school journey, such as a visit to a commercial bakery, was employed as a teaching method, it would offer a number of real values. For example, besides stimulating interest, offering the subject of study in its natural setting, and showing concrete evidence, it should perform the important function of blending school work with actual life. It should serve as the spark to set off discussion.

Few words are needed regarding the judicial selection and use of photographs, pictures, sketches, diagrams, charts, maps and all such forms of visual aids. Their quality, pertinence, accuracy, interest and beauty must be considered if they are to perform their right function.

This brings us to a consideration of movies as visual teaching aids. Their development is still in the elementary stage even though their value in presenting material in a condensed form, with vividness, and great emotional appeal, cannot be questioned. What is true of educational films in general is applicable to films available for homemaking education—i.e., the supply is relatively meagre, disorganized, and not always of the most desirable type.

However, only by using the supply on hand to the fullest extent can we convince the producers and distributors of commercial, federal, public, and perhaps even philanthropic origin, that we are sincere in our belief of their effectiveness.

A genuine appreciation of the deep significance of moving pictures in modern pedagogy flaunted through constant and popular demands for more and better educational films should signal producers to action toward meeting this need.

The educator, who, ten years ago said "Within the celluloid film lies the most powerful weapon of attack on ignorance the world has ever seen." was truly a progressive.

Films for Homemaking Education

Most of the films listed below (and the list is by no means complete) were selected from the Educational Film Catalog for 1936* Choices were made from the standpoint of the needs of the average home economics teacher for junior and senior high school classes. The Minnesota syllabus for home economics influenced the selection on the basis of the various units of study suggested. Unless the subject matter was of the type that did not go out of date, films older than ten years were not included. Those films listed for college level only, were also dicarded. Films which, in the writer's opinion, were of a prohibitive price, were also ignored. Some films, even though listed as suitable for home economics teaching, were discarded for being unworthy of appearing on this selected list. If the basis for choosing these films seems too personal, it is the writer's hope that her viewpoint is typical of the average home economics teacher in the average school in the average Minnesota town, and as such will serve a useful purpose.

* Miss Georgia H. Aber, graduate student at Stout Institute, Menominee, Wisconsin, is doing some interesting work toward a master's degree on this very subject. At present, she is titling and editing a film on cake making which she photographed last summer. The object of her work is to make possible a comparison of two teaching methods—a demonstration in a film, and an actual demonstration given by the teacher.

The film is not available at the present time, but teachers interested in using the film during the approaching school year may procure it on two conditions:

(1) Pay cost of return postage.

(2) Use the film in the manner specified and report results.

* "Educational Film Catalog", Cook and Rahbek-Smith.

Titles and Descriptions**	Length (min. or reel)	16 mm.	35 mm.	Jr. H. S.	Sr. H. S.	Loan	Charge	Distributor
CRAFTS								
"Arts and Crafts". Indian arts of yesterday and today; techniques and processes used in weaving, basketry, bead-work and many other crafts.	1r	*	*	*	*	*		25
DISEASES								
"Conquest of Diphtheria". Showing in interesting story form, the prevention of diphtheria by toxin-antitoxin	15	*	*	*		*		7
"Diphtheria". Prep. and use of anti-toxin demonstrated; modern diphtheria control and prevention shown.	15	*		*	*		24	3
"Tuberculosis and How It May Be Avoided". Bacilli shown growing in lung tissue of human body; tuberculin test given; daily routine at preventorium shown.	15	*	*	*	*		24	3
"Consequences". Teaches lesson that "early discovery hastens early recovery" of tuberculosis.	30	*	*	*	*	*		11
FAMILY								
"Survivals of Primitive Home Life". Some interesting domestic methods and customs which have been handed down through succeeding generations to the present.	1r	*	*	*	*	*		25
"Obedience". Demonstrates through the behavior of Emile that the principles of good citizenship practiced in the home lead to good citizenship elsewhere.	12	*	*	*			24	1
FIRST AID								
"Control of Bleeding". Shows accepted methods of control of bleeding in various areas of the body.	12	*		*	*		18	3
"Bad Master". Fire prevention; shows typical family committing common errors resulting in loss of life and property (sound).	11	*	*	*	*	*		10
"Fire Prevention". Effect of faulty, insulation; testing electric irons; spontaneous ignition; dangers of gasoline cleaning; the rubbish heap.	15	*		*	*		24	3
FOODS								
"Food Shot from Guns". Growth, harvesting, milling, and packing of grain; part of film taken in factory of Quaker Oats Co.	20	*	*	*	*	*		13
"Our Daily Bread". Evolution of wheat industry, beginning with the primitive and ending with most modern apparatus in use.	1r	*	*	*		*		14
"Golden Orange". The orange industry, from planting to packing for shipment.	15	*		*	*	*		15
"New Fashions in Foods". In color; shows experts dem. various new methods of preparing and serving citrous fruits and other food products. Free printed recipe sheets to go with movie.	2r	*		*	*	*		15
"About Bananas". Presents the banana industry, with scenes laid in Central America.	15	*		*		*		15
"Beet and Cane Sugar". Sugar-growing areas; all the processes of sugar industry.	15	*		*	*		24	3
"Island of Sugar". Shows world's greatest achievement in the cane sugar industry; how it is produced.	1r	*	*	*	*	*		14
"Sugar Trail". Methods employed in the sugar industry; the extent of the world's consumption of sugar.	1r	*		*		*		14
"Across the Seven Seas". Story of tapioca; cassava root; processes in making tapioca.	15	*	*	*	*	*		16
"Common Salt". Nature and action of salt; methods of extracting producing.	15	*		*			24	3
"Pillars of Salt". How salt is refined and prepared for market at one of the largest salt mines in the U. S.	1r	*	*	*	*	*		14
"Baking Powder". Should be of special interest to Dom. Science classes (sound).	9	*	*	*	*	*		17
"Meat Packing". Complete story of the industry; how cold storage and canning aided growth of industry.	15	*		*	*		24	3
GARDENING								
"Fruits and Flowers". The impulse for growing things carried through for a successful and completed garden.	12	*	*	*			24	1
HOME AND FAMILY								
"Working With Civic Organizations". How class cooperated with Chamber of Commerce to start movement to beautify city. Class selects ill-kept house and makes it a beauty spot. The effect of this work carries through the entire neighborhood.	12	*	*	*			24	1
"Service". Brings out through story form the fact that children owe service to their parents in performing some of the home duties. Shows inter-dependence of people.	12	*	*	*			24	1
HYGIENE								
"Bathing". Children dem. warm baths and cool showers; bathing at the beach, etc.	8	*		*			12	3
"Clean Clothes". Boy polishes shoes, brushes his coat, takes clean hanky, dem. proper use of napkin; girls wear aprons helping at home; clothes storage.	8	*		*			12	3
"Clean Face and Hands". Boy prepares himself for supper after outdoor play. A class is inspected for cleanliness.	8	*		*			12	3
"Cleanliness". Keeping the hair clean. Proper methods of shampooing and drying the hair; also care of brush and comb.	8	*		*			12	3
"Drinking Health". New York city water supply and how it is purified. Importance of water and amount to be consumed daily. Need for individual drinking cups and sanitary washing of dishes.	2r	*		*	*		*	4
"Feet". Structure and arrangement of arches, best mechanical use of foot; effect of improper shoes; relation of heels to posture; relation of good feet to efficiency and to enjoyment of life.	15	*		*	*		24	3
"Good Posture Wins". Factors in costume review contests and the importance of good posture in 4-H girls' club work.	2r	*	*	*	*	*		5
"Posture". Its effect upon size of chest, position of abdominal organs, and general personal appearance; how good sitting and standing posture may be developed.	15	*		*	*		24	3
"Redhead". The importance of the proper care of the hair is emphasized.	15	*	*	*		*		6
"Skin". Seen through magnifying glass; structure; growth of cells; secretion of sweat; structure of hair and nails.	15	*	*	*	*		24	3
INJURIOUS INSECTS								
"Why Moths Leave Home". Damage done to fabrics, feathers, upholstery by clothes moths; different methods of getting rid of the pest.	1r		*		*	*		5
INDUSTRIES								
"From Wheat to Bread". Primitive methods of making bread; a modern flour mill; a bakery, showing bread mixing, kneading, steaming, rising, baking.	15	*		*	*		24	3
"Furniture Making". Period designs; hand carving; machine production; painting; upholstering; arrangement of furniture in dining room and living room.	15	*		*	*		24	3
"Modern Industrial Methods". Four reels showing the manufacture of sewing machines.	60	*	*	*	*	*		24
"Tableware". Modern methods of manufacture as compared with old, show perfection in preparing clays for pottery, modeling, casting, firing, decorating tableware.	15	*			*		24	3
ILLUMINATION								
"Illumination". Principle methods of lighting; cause and correction of glare in home and factory; character of direct and indirect lighting.	15	*		*	*		24	3

** All films are silent unless sound is indicated.

Titles and Descriptions**	Length (min. or reel)	16 mm.	35 mm.	Jr. H. S.	Sr. H. S.	Loan	Charge	Distributor
LEATHER								
"Romance of Shoemaking". Prep. of leather and its use in the mfg. of shoes.	2r	*	*	*	*	*		18
NUTRITION								
"Digestion". Action of saliva upon food, swallowing, stomach structure, digestion of food, structure and action of intestines.	15	*		*	*		24	3
"Food". Suggests proper food habits; some general information on digestive system.	12	*	*	*			24	1
"Food and Growth". Feeding experiment with white rats, actually carried on in a sixth-grade classroom, is used to demonstrate food value of milk.	15	*		*	*		24	3
"Food Makes A Difference". Results of proper nutrition for children; lab. tests to determine effects of various foods.	2r	*	*	*	*	*		5
"Too Many Pounds". How modern comforts have weakened our muscles; dem. how to cut down on food calories; dangers of unwise reduction stressed.	1r	*	*	*		*		7
PUBLIC HEALTH								
"Disease Carriers". Breeding places and life cycle of flies and mosquitoes; methods of destroying; danger of rat pest; contaminated water.	12	*	*	*			24	1
"How Disease Is Spread". Series of dramatic episodes showing spread of infections; necessity of careful habits, and proper cleaning of food materials.	1r	*	*	*	*		35	8
"How to Prevent Disease". Contamination of water supply; pasteurization; quarantine; vaccination; anti-toxin; Schick test; contagious diseases; venereal diseases.	1r	*	*				35	8
"Serving the Community". Mary has typhoid; school principal explains causes; school plans campaign against fly; clean-up.	12	*	*	*			24	1
RURAL WATER SUPPLY								
"Turn on the Water". Danger of impure water on farms; good and bad water-supply systems; how to install inexpensive systems.	1r		*		*	*		5
SAFETY								
"Artificial Respiration" Simple directions and demonstrations.	1r		*	*	*		2.50	9
"First Aid—Care of Minor Wounds". Importance of immediate care; how to apply sterile dressings.	5	*		*	*		6	3
SOAP								
"Soap". The underlying principle of soap manufacture; main difference between hard and soft water; home-made soap; factory-made soap; how it works.	15	*		*	*		24	3
SCHOOL								
"School Industries". School children start vegetable garden and turn old room into cafeteria. Girls learn to cook and at small cost serve lunch.	12	*	*	*			24	1
TEETH								
"Care of the Teeth". Proper diet for good teeth; benefits of chewing; how to brush teeth; use of dental floss.	15	*		*	*		24	3
"Clara Cleans Her Teeth". Teaches a lesson in story form, on the importance of proper tooth care.	15	*	*	*		*		12
"Teeth". Growth, structure and methods of caring for teeth; diseases liable to occur and their relation to general health.	12	*	*	*			24	1
TEXTILES								
"From Flax to Linen". History of linen; spinning; weaving; finishing.	15	*		*	*		24	3
"Cicilization's Fabric". The manufacture of cotton fabrics; ginning, carding, drawing, spinning; warping and weaving.	25	*	*	*		*		19
"Cotton Goods". Covers the manufacture of cotton; production of thread; weaving and testing of cotton fabrics; some of the uses of cotton in everyday life.	15	*		*			24	3
"Land of Cotton". Story of cotton beginning on the largest cotton plantation, largest cotton terminal; and one of the largest textile mills in the world.	1r	*	*	*	*	*		14
"Within the Gates". From the picking of cotton to the finished shirt; pictures steps by which garment is shipped to store where it is sold to the customer.	30	*	*		*	*		2
"Woolen Goods". Source of wool; manufacture of wool; making clothes; testing fabric; shrinking cloth; finishing garment.	15	*		*	*		24	3
"Woolen Yarn". The wool industry; a brief history; methods, machines used.	1r	*	*	*	*	*		14
"From Cocoon to Kimona". See silkworms from the time they are hatched until they are sorted and the cocoons unravelled to become the raw silk of commerce	¼r	*		*			5	20
"Romance of Rayon". Shows the manufacture of Rayon in an interesting way.	18		*	*	*	*	*	21
"Romantic Story of Silk". Complete story of silk from silkworms in Japan to manufacture of silk fabrics in this country.	18	*	*	*	*	*		22
"Silk". All steps in production of silk cloth; printing designs; finishing.	15	*		*	*		24	3
"Tapestries and How They Are Made". The technique of tapestry weaving from the dying of the woolen yarn to finished product.	15	*	*	*	*		30	23
THRIFT								
"Thrift". How it may be practiced in matters of health, dress, time, etc., as well as in earning and spending.	12	*	*	*			24	1
VOCATIONS								
"Behind the Scenes in the Machine Age". Shows how modern invention is rapidly replacing hand labor—how working conditions for women have been improved. Excellent for study of vocations, etc.	35	*	*			*		2
"Story of the Women's Bureau". Development of the Bureau and how it works to achieve and maintain comfortable working conditions for the woman in industry.	15	*	*			*		2
"Industrial Worker". Comparison of number of pupils finishing grade school, high school and college. Conveys the necessity of preparing one's self for opportunities which may arise.	12	*	*	*	*		24	1

Names of Distributors

(Numbers correspond to numbers in chart).

1. Herman A. DeVry, Chicago, Ill.
2. Women's Bureau, U. S. Depart. of Labor, Washington, D. C.
3. Eastman Kodak Co., Rochester, N. Y.
4. Films of Commerce, New York
5. U. S. Dept. of Agriculture Office of Motion Pictures, Washington, D. C.
6. Cereal Soaps Co., New York
7. Metropolitan Life Insurance Co., New York
8. Bray Pictures Corp., New York
9. National Safety Council, Chicago, Ill.
10. Aetna Life Insurance Co., Hartford, Conn.
11. National Tuberculosis Assoc., New York
12. Dr. T. B. McCrum, Kansas City, Mo.
13. Quaker Oats Company, Chicago, Ill.
14. General Electric Co., Schenectady, N. Y.
15. Castle Films, New York
16. National Council of Y.M.C.A. Motion Picture Bureau, Chicago, Ill.
17. Gaumont British Picture Corp. of America, New York
18. Melville Shoe Corp., New York
19. Fruit of the Loom Mills, Providence, R. I.
20. Burton Holmes Film Library, Chicago, Ill.
21. Viscose Co., New York
22. Belding Hemingway Corticelli, New York
23. Metropolitan Museum of Art, New York
24. Singer Sewing Machine Co., New York
25. Religious Motion Pictures Foundation, New York

American Education Week, November 7-13

The nationwide observance of American Education Week affords an opportunity to focus the attention of parents, teachers and all citizens upon the importance of education to American democracy. The theme selected for this year is: Education and Our National Life.

New Tricks in Accessories

By Kay Short

Valise-shaped bag and matching belt, crocheted in a simple stitch.

This bunch of cherries (crocheted), with bright red blossoms and green leaves, makes a colorful ornament.

Note: Complete directions for making any or all of these accessories may be obtained by writing to this department.

Since accessories often "make" a costume, it is only fitting and proper that a little time and thought be spent on them in any sewing class. This Fall, fashion decrees more emphasis than ever on "the finishing touches" so perhaps more than class discussion is in order, and the actual making of them should be arranged as a part of the year's project.

I don't believe any sewing teacher will have the slightest difficulty in arousing class interest in any of the colorful and novel accessories shown on this page. An immediate response is certain to be manifested as soon as they are shown, and with a little help from the teacher as to suitability and practicability for individuals, most students will need no further stimulation to proceed with enthusiasm.

None of these accessories is beyond a high school girl's ability and any one of them may be finished quickly before interest lags. Perhaps more than one may be attempted by students who show an aptitude for handwork and have the extra time to devote to it.

As you will note, a number of the accessories illustrated are crocheted —both with thread and Cellophane—into decidedly attractive additions to any costume. The bag and belt (upper left) is crocheted in a simple stitch, adding a striking note of contrast for Fall frocks, particularly when made up in two colors as shown. The bunch of cherries (upper right) makes a very colorful ornament for lapel, hat or dress.

The fishnet scarf (shown left) can be made in a jiffy in a single crochet stitch. A small amount of cotton yarn is used, which makes it inexpensive, but nevertheless adds a very dressy note to tailored suits, etc.

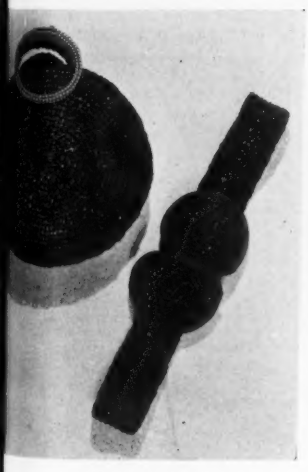
It is no trouble at all to make the stunning jet black, shiny flapjack purse and belt (shown left). It is all done by crocheting ribbons of Cellophane into discs and putting these together. And if you want to add sparkle and color to a plain dress, the collar and cuff set (shown right) is easily crocheted with any preferred combination of colored Cellophane ribbon.

The youthful and attractive calot (shown right), though it cannot be distinguished in this photograph, is made in three colors of yarn, which give it a variegated appearance that easily blends with any costume, and the entire calot is made in a single crochet stitch. It would not be amiss to make several of them in solid colors to match favorite sport suits.

The varied accessories shown below are fun to make. They are so different and distinctive and all are made very simply with crepe paper, sealing wax and passe-partout.

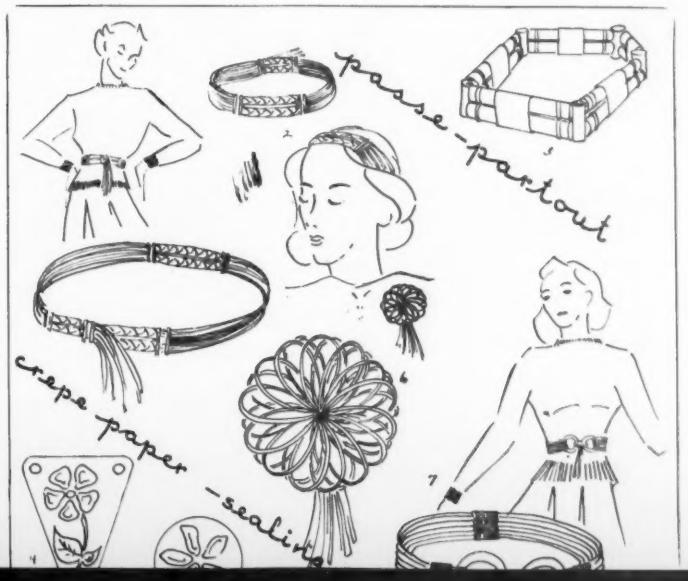
Crocheted fishnet scarf.

A collar and cuff set crocheted with clear and red Cellophane ribbon.



Jet black Cellophane ribbon is used to crochet this stunning little purse and belt.

This youthful and attractive calot is made in single crochet stitch, in solid or vari-colors.



A gay belt (Fig. 1) made with strips of crepe paper, braided and twisted, with hairband to match (Fig. 2). The bracelet (Fig. 3) is made of beads of passe-partout and elastic. A most attractive geranium flower clip (Fig. 4) may be made with sealing wax.

The flower button (Fig. 5) is made the same way. The boutonniere (Fig. 6) is a masterpiece with different colors of pulled crepe paper. The Brooks belt (Fig. 7) is accomplished with crepe paper, curtain rings and wire.

A Study in Bath Towels

By Rosamond C. Cook

University of Cincinnati

IF we give any particular thought at all to the problem of buying bath towels we will generally include service and appearance in the home, and size, appearance, and price as we buy in the store. Studies made during the past year in the textile laboratory of the School of Household Administration, University of Cincinnati, provide ample proof that there is more to the story than appears upon the surface of the towel. Color and design in bath towels are so much a matter of personal opinion and choice that these factors will not be discussed in this report. Instead we will look at the facts that are related to texture and upon which durability depends; then study the results of laboratory tests to determine how well present buying methods serve us in securing desired qualities at the most advantageous price.

Bath towel material, sometimes called terry cloth, is constructed with three sets of yarns, *warp* and *filling* which form the background, and *pile* yarns, added warpwise, to form loops to cover the surface and thus aid in absorption. The method of weaving the background is related to the pile yarns. The simplest construction is a plain over and under weave in which a loop of the pile yarn is made with each woven filling yarn. This is called a "one-pick" weave and is the cheapest method of weaving towelling. "Pick," by the way, is another name for filling yarns. Other methods of construction include three, four, five and six filling yarns between the rows of pile loops; usually the larger the number of yarns between the loops the stronger and firmer the material. Three-pick weave is the most common method in medium and low priced towels. Illustrations 1 and 2 show different qualities of towels having a three pick weave.

The number of yarns to the inch in the background is also important both lengthwise and crosswise. Closely packed yarns mean greater firmness and strength as well as greater security in fixing the pile yarns. This fact remains the same regardless of the number of picks between pile loops.

To thoroughly understand the methods of weaving towels secure old towels, remove the pile loops on both the front and back so that the weave is not obstructed and study the groupings of the filling yarns between pile loops, then count the number found in one inch. Count the warp yarns and compare with the number of filling yarns to the inch of cloth. Notice the lack of balance between the number of warp and filling yarns in illustrations 1 and 2.

The next factor to study is the construction of the yarn. Bath towels are usually made from cotton fibers though linen towels are occasionally found in the market. In any case the size of the yarn and the amount of twist should be carefully studied. Single yarns, those made from a single twisted thread, are commonly used. Untwist the yarns from several samples and determine which has the most and the least twist. Yarns having a good deal of twist look smooth and are hard and firm, while those having little twist look and feel soft. *Illustration 1.* Uniformity of size throughout the length of a yarn adds to the strength of the background. Notice the unevenness of the yarns in the samples in *Illustration 1* and also the great difference in size between the filling and warp yarns in the various samples in *Illustrations* 1 and 2.

Pile texture depends upon the type of yarns used and the method of construc-

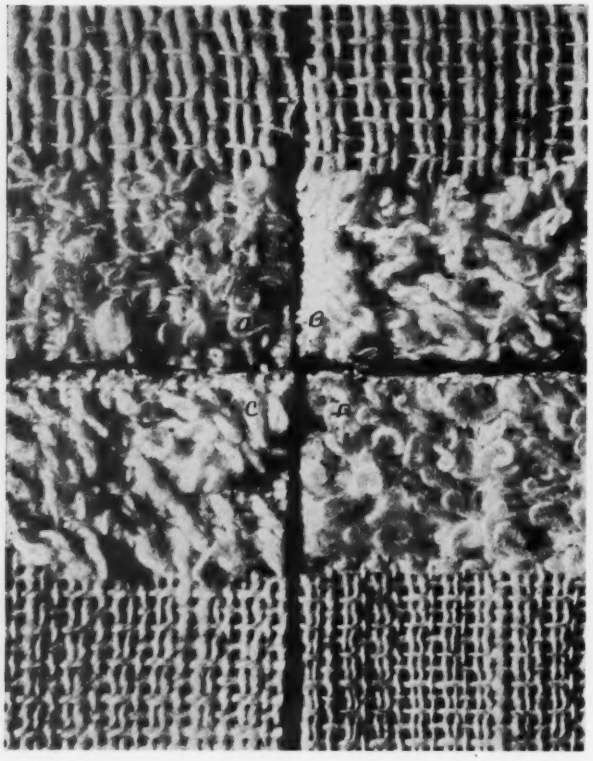


Illustration 1. Lack of balance in yarn size and yarn count.

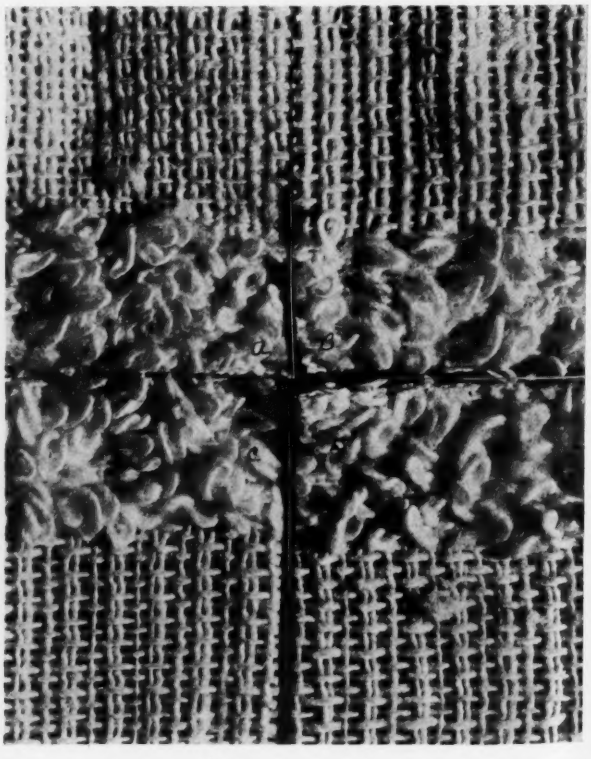


Illustration 2. Unevenness and poor quality in yarn.

tion. Observe these differences in all three illustrations. The pile loops may consist of one yarn of medium size having a medium amount of twist, or two yarns of smaller size may be used. Sometimes as many as five or six fine yarns are bunched together to form the loops. When this is done a narrow strip of plain weave spaces the pile loops into narrow bands to form a ribbed or corduroy effect. A towel may have a ribbed effect on one side and plain on the other. Mercerized yarns are frequently used to form the pile on towels, but while this gives a handsome silky effect the absorption value of the towel has been greatly decreased. This is due to the fact that the capillary action of the cotton fibers has been reduced by the process of mercerizing.

The pile loops may be long or short according to the quality and design of the towel. Some pile is curly in appearance. This effect is usually obtained by combining two yarns, one having a right hand twist with another having a left hand twist. These yarns are twisted slightly for weaving but because of the reverse twist in the single yarns they separate as soon as the material is woven. See *Illustration 3.* Pile loops made in this manner do not, on the whole pull out as easily as when made from a smooth single yarn.

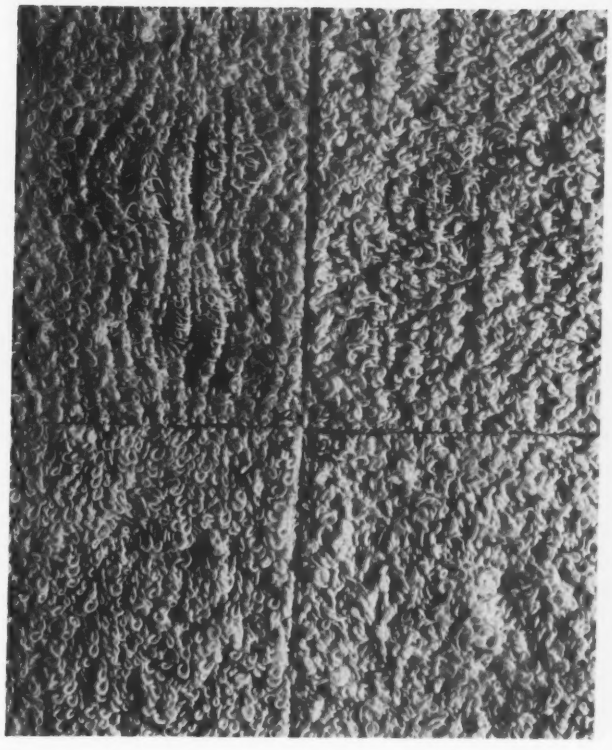


Illustration 3. These four samples show how the construction of the towel is related to durability.

The relative amount and weight of pile to the background of the towel is important. A towel having a light weight background and a heavy pile will not have the durability of a towel in which the two parts have a better balance. *Illustration 3* shows a common disaster when there is a poor relation of yarns between the warp and filling in the background and between background and pile.

Selvedge is another important point in a bath towel. Very cheap towels are woven on a wide loom with a strip of plain weave to indicate the intended width of the towel. The widths are then cut apart and the towel put on the market with unhemmed edges. Unless the buyer has noticed this fact and hemmed the towels before use they ravel quickly and are soon unfit for use. The selvedge on a well constructed towel should be closely woven with a heavy firm yarn on the outside edge to prevent breaking.

The size of a towel is important for several reasons. Many people do not know that there are standard sizes for towels. It is well to know these sizes for special sales and "special prices" may not be "special" but merely towels made shorter and narrower than the standard and when compared in size and price with standard sizes at regular prices it will be found that nothing has been gained. It is a well known practice for stores, especially the large buying chains, to bargain with manufacturers for goods to made to "sell at a price". This usually means that something must be done to cheapen the quality of the products otherwise the goods would be made at a loss to the manufacturer. An inch of goods lengthwise and crosswise, fewer threads to the inch in the warp and filling, a change in the size of the yarn can seldom be detected by the consumer but make a sizeable saving in the manufacturing cost of one hundred thousand towels.

Size of towel should be suited to purpose. A child does not need a large sized towel for bath purposes. In fact psychologists tell us that equipment for children should be suited to size and age for the most effective training. Small bath towels substituted for hand towels for children are economical both in original cost and in laundering since they are easy to wash and need no ironing. It should be recognized that the investment in a small towel is less and in the end it is better to have a good towel of medium size than a larger one of poor quality.

When laundering is done in the home many people prefer two small towels rather than one large one, because bath towels hold so much water that weight is rapidly increased with size and the large towels are much harder to handle. Another point worth mentioning is the relation of quality to size. On the whole about the same range of qualities can be found in all sizes of towels and poor quality and small size do not necessarily go together. The following is a list of standard sizes in bath towels and it will be noticed that the sizes are not difficult to remember if we fix the fact that the length is nearly always twice the width.

TABLE OF STANDARD SIZES IN BATH TOWELS

27 x 54 or 59 inches
27 x 47 inches
26 x 56 inches
25 or 26 x 52 inches
24 x 48 inches
22 x 44 inches
20 x 40 inches
19 x 36 inches
18 x 36 or 38 inches
17 x 34 inches

From the foregoing discussion of the quality factors in bath towels we can see that thread count, breaking strength, weight and size are important items in relation to utility. Let us now study the results of tests made on sixteen towels.* (See chart on next page.) Towels numbered 1 to 8 inclusive and numbers 11 and 12 are manufactured by the same company; samples 9 and 10 represent another manufacturer and numbers 13 to 16 inclusive represent a third company. Two towels, A and B, are completely analysized to check the tests for each number. Differences in results between samples A and B are in most cases small enough to come within any allowance of margin for tolerance. It will be noted that actual retail price is not available for all samples.

First let us check the sizes of the tested towels with those of standard size.

* All tests conform to the methods and standards set by the American Society for Testing Materials.

Samples 3, 4, 5, 9, and 10 would undoubtedly fulfill the requirements for the standard sizes which they represent. Samples 6, 7, and 8 should be checked by testing more samples. Sample 11 would meet the standard for size 22 x 44 but sample 12 falls short by three inches of meeting the standard length of a 24-inch width towel. Samples 13, 14, 15, and 16 do not meet standard sizes. Sample 13 is interesting in that it is *wider* by one inch than the standard.

In weight the towels can be definitely classed as 8, 9, and 10 ounce towels. It should be noticed that with the exception of sample 2 the margin of difference in the weight between samples is extremely small.

In our study of thread count notice first the agreement in count between the two samples of each number. With one exception, number 7, there is no variation. The relation of yarns, or balance, between warp and filling does not present so happy a picture. The range of warp yarns to the inch varies from 22 to 42 in the 16 samples; the range in filling yarns varies from 26 to 42. Notice that in eight of the samples there are more yarns in the warp than in the filling; in five of the samples the reverse is true while in samples number 9, 15, and 16 there is a true balance.

While yarn count is important in making any analysis of weave and quality in textile materials it is most useful when taken into consideration with breaking strength. The range of breaking strength for the warp yarns varies from 17 pounds to 63 pounds to the inch. In the filling, breaking strength varies from 26 to 46 pounds per inch.

Comparing the balance in breaking strength between warp and filling yarns and the balance of yarns in thread count we find several interesting facts. First, Sample 9 is the only towel in which there is an agreement between yarn count and breaking strength; 32 and 34 yarns to the inch and 34 and 35 pounds breaking strength to the inch. There are several other samples with a good balance however; for instance notice Sample 1 with a thread count of 36 and 42 and a breaking strength of 35 and 36 pounds respectively; sample 2 is also well balanced. Notice that sample 8 which has the same yarn count as sample 1 has a greater variation in the breaking strength. Sample 14 with *more yarns* to the inch in the *filling* has a *greater-breaking strength* in the *warp yarns.* Sample 16 which has nearly a balance of yarns in count, that is, 22 and 26, has a breaking strength of 17.7 and 45.2 showing a complete lack of balance from a durability standpoint. Samples A and B in *Illustration 1* are magnified pictures of number 15 and 16 on the data table. Sample C in *Illustration 1* is sample number 9 on the table and shows a good balance of yarns in count, evenness and size and breaking strength. Although there is not a complete balance in count and breaking strength in sample number 12, yet the difference is not great and the evenness of yarns and texture plus the large size in relation to the price makes this one of the best bargains of the sixteen tested.

The importance of a proper balance of yarns is well demonstrated in *Illustration 3.* We have all seen towels with the pulled places illustrated here, and to prove that construction is related to this problem, samples of the towels in the test were pulled between the thumb and forefinger of the two hands with the following results. A is towel 13, yarn count 24-30, breaking strength 18-33. B is towel 6, yarn count 42-32, breaking strength 49-31. C is towel 9, yarn count 32-34, breaking strength 34-35, D is towel 12, yarn count 42-38, breaking strength 40-47.

It was not possible to secure the actual selling price of all the towels tested but there are enough to show that there seems to be little real relation between quality and price. For instance towel 16 is one of the poorest, if not actually the least desirable, while towel number 1 is well balanced in yarn count and breaking strength, yet they are both priced at 29 cents, next to the highest price. Again compare the qualities of samples 13 and 16 and note that they are almost alike in quality, yet one is ten cents less than the other. Compare numbers 11 and 12, note the balance of yarns and the price. Which would you select as the best for the money?

There are undoubtedly many who reading this report, will want to know if it is not possible for the consumer to distinguish these differences by feeling and scrutiny. Like Amos 'n' Andy the answers is "yes *and* no". It is of course possible to see quality differences between the smallest, lightest weight and the poorest and the largest, heaviest and best towel. In the case of towels number 1, 2, and 3 all priced at 29 cents, number 1 is the best of the three—yet it would be almost impossible to distinguish between them in the store. Take towels 11 and 12 and many people would accept number 11 as the better and think they had secured a bargain when price is compared, yet 12 is the better buy.

All of this leads where? The answer seems to be something like this: at present stores do not furnish detailed information regarding the quality factors of bath towels, yet studies like this one and others show how the consumer is handicapped in buying. In addition only a small per cent of the consumers who buy and use towels themselves know the need for factual information, and finally, few store heads and department buyers know any more about the construction of terry cloth than the consumer and therefore are not prepared to buy on specification, or supply information about them.

To solve these problems is not easy, but we do know the way to begin: first, consumer information secured through classroom exercises and studies; second, direct contact for discussion with salespeople and heads of departments in

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TABLE OF DATA FOR TESTS ON TOWELS

May 5, 1937

No.	Letter	Size Width-Length	Thread Count		Tensile Strength		Wt. per sq. yd. in oz.	Price (cents)
			Warp-Filling		Warp-Filling			
1.	a	19 x 40	36	42	35.4	36.5	9.54	29
	b	19½ x 40½	36	42	34.9	40.8	9.47	
2.	a	22 x 42¾	38	30	38.5	39.6	9.46	29
	b	21⅜ x 42¾	38	30	35.5	36.2	8.31	
3.	a	18 x 35½	38	32	42.2	27.4	8.60	29
	b	18½ x 35¼	38	32	47.1	30.2	8.39	
4.	a	19½ x 40¼	38	30	43.5	28.9	8.27	
	b	19½ x 39½	38	30	43.4	30.4	8.73	
5.	a	18 x 36	38	32	45.2	27.3	8.35	
	b	18¼ x 35½	38	32	46.2	26.0	8.55	
6.	a	21½ x 43¼	42	32	49.8	31.8	8.44	25
	b	22 x 42¾	42	32	51.7	27.3	8.64	
7.	a	21½ x 44	40	32	43.1	29.8	8.60	25
	b	21¼ x 43	38	32	44.3	26.8	8.73	
8.	a	19½ x 39½	36	42	33.5	41.0	9.34	25
	b	19 x 39¾	36	42	32.6	38.3	8.66	
9.	a	22 x 44	32	34	34.1	35.5	8.87	
	b	21½ x 44	32	34	35.5	39.6	8.92	
10.	a	20¼ x 40¼	34	38	36.0	46.6	9.52	
	b	20 x 40¼	34	38	34.5	48.6	9.70	
11.	a	22¼ x 43¼	42	32	63.2	30.1	10.65	3 for a
	b	22¼ x 43¼	42	32	63.8	29.1	10.53	dollar
12.	a	24¼ x 44¾	42	38	40.0	47.2	10.82	3 for a
	b	24¼ x 45	42	38	43.6	46.3	11.19	dollar
13.	a	23 x 44½	24	30	18.5	33.8	9.93	19
	b	23 x 44	24	30	17.7	33.7	9.69	
14.	a	20½ x 38¾	28	34	34.6	28.6	8.82	25
	b	20½ x 39	28	34	34.4	32.5	8.85	
15.	a	20¾ x 39	26	28	22.1	40.1	10.27	29
	b	20¾ x 39	26	28	21.6	42.3	10.56	
16.	a	18 x 35	22	26	17.7	45.2	8.09	29
	b	18 x 35	22	26	17.9	46.8	8.36	

Environmental Care of the Growing Infant

By Charlotte Walls, B. A.
New York City

OUR title means, keep baby growing straight through environmental care. This refers to all of the elements which enter into the physical welfare of the infant,—his bed, his carriage, the table used in dressing him and all of the necessary handling of him daily. We use all of these environmental factors to train baby's body to continue growing straight. Very, very few babies are born crooked. Most crookedness is acquired after birth. There are exceptions of course, but in this article we shall consider the larger number who are born with normally straight spines. The normal curves from front to back which appear as the child raises his head and stands and walks are for elasticity and resilience. They are not discussed here.

First let us compute the amount of time when the infant's body growth can be affected by his environment:

Six feedings each day of twenty minutes each make..120 minutes
Each diaper change must consume at least five minutes and on an average there are sixteen changes a day .... 80 minutes
Morning bath and dressing consume probably more than 30 minutes
Preparations for bed at night..30 minutes
Naps morning and afternoon amount to about .....240 minutes
Sleep at night should be at least .....840 minutes

making a little over twenty-two hours. Add to this the remaining two hours when baby may be asleep or awake, and we can easily see that every moment of the twenty-four hours of every day is important.

An infant's skeleton is very soft because the lime which makes bone hard has not yet been deposited in them. If baby's bones were hardened before birth delivery would be much more difficult for the mother. Very soon after birth the lime or calcium from his food causes the bones to begin to harden. This is part of the natural growth of any infant.

If the child is constantly laid down in one position the bones of his head may be flattened on one side and the ear on the under side may become smaller, or the head may become flattened at the back. If he is held always in one arm, his soft body will fit around the adult's always in the same way and one side will be shorter than the other.

Ofter these discrepancies in bony formation are not evident to the eye of the casual observer until the child begins to lengthen out, and then when he is tired he slumps into the posture or body mechanics to which his early care predisposed him.

Twenty-four vertebrae make up the spinal column. If each small bone has been ever so slightly compressed on the same side, the sum total is not a straight spinal column—but a curved column. This we recognize as one kind of spinal curvature of the spine.

There are many causes for curvature developing later in the growing child such as,—rickets, torticolis, malnutrition, glandular troubles, fatigue, careless attitudes in illness, convalescence, sleep, sitting and standing; one sided plays like marbles, one foot used in skooting or roller skating, bouncing ball and swinging one leg over it always; obesity; underweight; poor vision; poor hearing; incorrect clothing; badly adjusted seats at school and at home; too short a bed; operations and certain diseases, but, if the twenty-four vertebrae have had a chance to grow symmetrically from the beginning, the uneven muscle pull developed later can better be corrected and the spine more easily restored to symmetry.

If the following abbreviated form of directions is carefully adhered to and if the pediatricians' directions about food and medical care are meticulously carried out, baby will be given a chance to develop a good spinal column and a well shaped head.

1. Never allow an infant's head to twist or roll suddenly, or to hang backward.

2. Be sure to support his head well in lifting, holding, or carrying him.

3. Pick baby up so that all of his body is evenly and completely supported.

4. Hold baby in the right arm exactly as much time as he is held in the left arm. While holding him try to keep his chin near his chest.

In holding baby across the lap for colic, his head should be at mother's right hand half of the time and at her left hand the other half of the time.

5. A breast-fed baby feeds from the right breast one time and from the left breast the next time, alternating continuously. Quite without effort his mother balances his body during feeding time.

6. The bottled fed baby must have the same chance. Hold baby in the right arm and the bottle in the left hand one time, next time reverse the hold, have baby in the left arm and the bottle in the right hand. Change every time.

7. The very best plan for both methods of feeding is for the mother to lie down upon the bed, with baby at her right side one time and at her left side the alternate time.

Baby was an increasingly heavy burden to carry, then mother had to push very hard to deliver him, so she needs the rest she can so easily have if she will lie down while she is feeding baby.

8. Baby should be dressed, undressed, diapered and sponge bathed while he is lying upon a solid table with his feet toward mother. Reasons for this are: a canvas table sags; mother's lap is an uneven hill; the bed should be kept fresh.

9. Carry baby in the right arm just exactly as much time as he is carried in the left arm. Remember to reverse the arm action exactly. A small baby should be carried horizontally. He likes to be held snugly for he was packed up tightly before coming into the here.

10. When baby can support his own head well, he may be carried vertically. Just lifting his head does not mean he can support the weight for long periods of time. Put a hand behind his head and neck to avoid jerking. Baby cannot shake his head as we can to get a kink out of his neck, so we have to avoid his getting a kink from a sudden jerk.

11. Lay baby down on his right side one time and on his left side the next time. Change him every time he is laid down. Put a roll of blanket behind him to keep him where you lay him.

12. Take an old much-washed cotton blanket, fold it smoothly, roll it into a roll about twenty inches long and ten inches through, tie it in two places to keep it just so.

13. Use this behind baby. It keeps its shape better than a pillow and is not nearly as warm as feathers or woolen. Snug baby up to the roll. Thus you control his sleeping positions. Baby does not need a pillow to sleep on.

14. Changing from left side to right side helps in balancing the growth of head and ears.

15. After a time when baby can control his head well, he may sleep on his stomach one time and on his back one time. Great care is necessary to have the under sheet securely tucked under the mattress. It is also necessary to see that baby does not turn his head to one side

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Note: Miss Walls is a well recognized physical educator and physiotherapist and is associated with four hospital children's clinics.

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THE SCHOOL LUNCH

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The Child-Centered Cafeteria[1]

A Successful Plan For An Elementary School

Carl H. Kumpf, M. A.
Principal, Eggertsville Elementary School
and
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IN this adult ordered world can our elementary school cafeteria be set up just for children? Can we provide one or two unit lunches at such low cost that *a la carte* foods will be passed up so that we know a child gets the proper combinations of food? Will "Popeye" spinach soup attract children? Are parents really interested in what the school cafeteria feeds their children at noon? Can we make such a cafeteria self-supporting yet nonprofit making? How can we sell the idea to the board of education? Can we possibly use student help? Can we make cafeteria experience edcuational so that it will attract the high I. Q. and the well-to-do as well as the opposite type of child who might need the extra food? All these and countless other questions were debated *pro* and *con* by the co-authors as they dreamed their ideal cafeteria. Two years were spent in dreaming and planning before the opportunity for action presented itself in the Eggertsville School.

A brief history of conditions will reveal to the reader the cause of the dissatisfaction with the old cafeteria setup and the impetus which prompted the two year campaign for improved conditions. The Eggertsville Elementary School is a progressive school located in a suburb next to Buffalo, (N. Y.) The community is comparatively new and growing, being made up of parents who are for the most part college graduates. Many are in the wealthy class but there are those at the other economic extreme.

When the school was first built several years ago the partition was omitted between two classrooms to provide a makeshift cafeteria which was let out on a concession basis to a woman in the community. The Board of Education provided heat, gas, light, refrigeration, equipment, and $450 for laundry and an assistant for this concessionnaire whose sole job was to provide the noon meal. She had no responsibility to the principal and her only motive in working was to make a profit. Although the beginning of the noon hour was staggered from 11:15 to 12:00 o'clock for the several grades, it was not uncommon to find one grade in line for a half hour. Why? Inefficiency for one thing, but primarily because the profit motive being uppermost, the cafeteria manager never made up a sandwich until it was ordered and the assistant was not allowed to serve any food for fear the servings she gave would be too large. The last grade to come to the cafeteria took anything it could get because there was never enough of any one dish prepared to supply all children. Macaroni and cheese was plain macaroni; cream of celery soup was made with water; cocoa was made with water and prepared cocoa powder; etc. The candy counter made a tremendous appeal to the children. If the principal protested, as he often did, about the length of time the children stood in line, or that the last class in the cafeteria was entitled to at least the same choices of food given grades coming to the cafeteria earlier, or that the candy counter was a menace to children's health because those who could least afford it bought candy in preference to food, such a volley of excuses poured forth that one felt like forgetting the whole issue.

Such conditions existed and the authors continued to seeth inwardly and gradually outwardly. Almost every contact with members of our Board of Education ended with a discussion of the kind of cafeteria we could and should have.

Last year an addition was built on to the school with a new cafeteria comprising one section of the building. Here was our opportunity! With a change in environment should come a change in organization and personnel and our dream cafeteria could come into existence. Unfortunately, a neighboring school had managed to run several hundred dollars deficit each year so that the Eggertsville School Board, although they approved our plan, were hesitant of having the school take over the cafeteria management. They seemed to forget that the $450 they were investing in the cafeteria run for the profit of a concessionaire was, in effect, a deficit.

They agreed to try our plans but insisted upon giving the same woman the opportunity of operating on the proposed new basis if she wanted the job. She accepted — much to our disappointment, for we knew from past experience that she was untrained for the plans we had in mind and, furthermore, that she would be uncooperative.

Construction delays gave us another half year to further our plans. The authors spent three months working out unit lunches and a set of records[2] that show daily what is happening in the cafeteria. The former concessionnaire had no idea what a balanced unit lunch meant and she did not trouble herself to prepare for the new job.

[1] Rugg, Harold O. and Schumaker, Anne. *The Child-Centered School: An Appraisal of the New Education*. World Book Co., 1928.

[2] A complete set of records, which may be mimeographed in quantities, may be secured for the price of 75c. Address Cecile and Carl Kumpf, Eggertsville, N. Y.

When the cafeteria was ready to open a bulletin was sent home to all parents telling them that, with the opening of the new cafeteria, a new type of service would be offered to include two unit lunches costing 10c and 15c. Insofar as possible, these would be balanced lunches from the standpoint of food value, color, texture, etc. A week's menus would be sent to the parents each Friday for the following week to enable them to take the child's noon lunch into consideration in the daily food plan, if they desired. One week's menus were inclosed with the bulletin. The bulletin further explained that a candy counter would not be a part of the new cafeteria and the reasons for discarding it. The cafeteria would become an integral part of the school under the same supervision accorded other phases of the educational program.*

The authors were on duty in the cafeteria the entire first week. The manager had nothing to do but purchase and prepare food and wash her own cooking equipment. Day after day she complained that she could not get through with the work until the Board of Education was on the verge of believing it couldn't be done by one adult with student help. Rather than admit that here was a plan beyond her training and experience she walked out at the end of the first week.

The Saturday and Sunday following were spent by the authors in organizing the cafeteria and preparing for Monday's menus according to the lists which had already been sent home to the parents. Now was no time to close the cafeteria until a new manager could be found. On Monday, when the student help arrived, they were amazed to find all in readiness to serve the first grade which came at 11:15 A.M. For two weeks, while one of the authors had active management (and did all the work) classes moved through at such a rapid rate that no class caught up with the preceding one. Food was hot and good. Parents were surprised at the quantity and quality of food for the price. The author was able to walk out of the cafeteria by 2:30 daily with everything in order and spend the afternoon figuring costs, invoicing supplies, placing daily orders, etc.

Everyone concerned, the authors and the Board, were amazed at the difference in service and the low costs possible, even though all perishables and meats were coming from the only store in the community which sold nothing but the best and at very high prices. The first week's experience "under new management" convinced the Board that what was needed was a trained home economist. This was beyond our dreams, but one was secured and each week, except the first, the cafeteria has shown a profit in spite of paying the dietitian's salary, the laundry, and all food costs—yet not one cent of the $450 advanced by the Board had been touched.

How was this possible? The first and foremost item in the success of the new plan was probably the bulletin to the parents. The most unique service is the weekly menus sent home in advance. This enables parents to help their children choose the lunch desired. The children know when they arrive at school which lunch they are going to have. Now parents can safely leave their children in school for the noon lunch and know they will be well fed.

Each teacher has been provided with a lunch order sheet on which she marks, at 9 A.M., the number of 10c and 15c lunches, the amount of money received, and sends both the order and the money to the cafeteria where both are recorded and the correct number of different colored tickets are returned to the classrooms to be distributed to the proper pupils before lunch time. In a few moments the dietitian, who has planned and prepared up to a certain point, knows the exact number of unit lunches to be served that day. Through this simple means not only is all waste in the cafeteria eliminated, thus lowering the cost, but also the unsanitary practice of having those who handle food handle money.

In planning the two unit lunches, which always include a half pint of milk in some form and some hot food as well as adhering strictly to the recognized principles of menu planning, the dietitian also takes into consideration that small children like variety but small helpings. Sixth graders who order the same unit lunch receive larger helpings than the first grades. Mothers have commented that their children eat things at school that they would not eat at home. Where children eat together they are apt to eat what their companions do with little or no question. This was one of our ideals in planning the child-centered cafeteria—that good food habits would be formed. Health work in the school takes on new meaning when its principles and theories are carried out in practice in the cafeteria.

There is no separate dining room for teachers. Staff members are encouraged to eat with their children from time to time for good fellowship and to inculcate good table manners on the part of the pupils. All teachers of the lower grades come through the cafeteria line with their children in order to assist them should they need it. In addition to the unit lunches several items such as milk, soup, fruit, etc., are sold *a la carte* to enlarge the unit lunches or to supplement a lunch brought from home.

Everything has been done to make the children feel at home in the Eggertsville School cafeteria and at the same time to have them help themselves as well as the dietitian. Teachers are informed in advance of any contemplated changes and they, in turn, notify their pupils. Possibly if we follow a class through the cafeteria line the reader will more readily understand not only how this reciprocal service takes place but what services student help in the cafeteria can render.

At the entrance to the service room are an *a la carte* menu board and a table at which a child sells *a la carte* tickets. Those wishing unit lunches have their tickets which were purchased through their classroom orders. Just inside the service door the cafeteria counter begins. The child secures his tray, places it on the sliding counter and upon it puts his ticket so that all helpers behind the counter may see at a glance, by the color of his ticket, which unit lunch he is having or whether he wishes *a la carte* items.

The first child helper places on the tray the correct silver, wrapped in a napkin, for the ticket displayed. If the consumer takes *a la carte* items he selects his silver and a napkin as he leaves the service room. A child helper at the steam table has ready the hot foods corresponding to the ticket as each child reaches that part of the counter. Sandwiches, desserts, etc., are picked up by the child as he passes.

All of these foods have been prepared by the dietitian in advance, which leaves her free to supervice student helpers during the serving period. The duties of the helpers are posted in the kitchen so each child can acquaint himself with what is expected of him and thus need the explanation of the dietitian-teacher but seldom. By having the helpers rotate their jobs, no task or helper becomes thought of as inferior to any other.

The line moves rapidly because very little talking needs to be done, because of the colored tickets which speak for themselves, because choices have been made in advance, and, because children can help themselves. As the child passes into the dining room another child helper checks his tray and takes his ticket. Both the *a la carte* ticket seller and the ticket taker have regular forms to be filled out and are directly responsible to the principal.

The dining room is light and cheerful and comparatively quiet with its terrazzo floor, buff tiled walls and acoustically treated ceiling. A drinking fountain has been supplied so that fewer water glasses need be washed. The Garden Club of the school raised money to put a potted plant on every table, while hanging baskets of trailing plants or flowers filled the windows.

Children take their soiled trays to a table near the dish washing sink, remove

(Turn to page 384)

* This need not alarm home economists as all education in the school should be the direct responsibility of the principal. His help is one of cooperation rather than domination.

Quantity Cooking in High School

Practical Experience in Cafeteria Work for Home Economics Students.

By Margaret King

Waterloo, Iowa

IN our High School a plan was worked out to provide children with wholesome lunches, give High School girls experience in large quantity cooking and serving, and still use the Home Economics equipment and instructor already provided. We have two cooking laboratories, one of which opens into a group of rooms which are used for serving space. This combination is our cafeteria kitchen. Shelves are built in on one wall for storing dishes used in serving and preparing the lunches. Large quantity cooking utensils, dishes, silver, and trays for serving are the only additional equipment needed.

The girls who are admitted to the course (which is an elective for either one or two semesters) have had training in foods preparation in Junior High School and one semester in High School, and are selecting the course in order to get more experience in actual food preparation. We have an average enrollment of thirty-five. The class period used is the hour before noon, and by noon the lunch is ready and arranged for cafeteria service. The average number served each day is sixty. Since some dishes cannot be prepared in this time, we have worked out a plan whereby three or four girls use the first period, which is a study period for most of the pupils of our high school, as their class period instead of the usual third period just before noon. This group we call EXTRA PERIOD.

The class is arranged into groups. MENU, which plans five lunches for the next week, will act as CASHIERS then. MAIN DISH which prepares the two or three main dishes we serve. SALADS, SANDWICHES, BEVERAGES, and DESSERT groups take care of these foods respectively. Special groups care for the HOUSEKEEPING, PANTRY and DISHWASHING. The last group washes, dries, and puts away all dishes and utensils used by all of the groups during the preparation period. This solves the dishwashing problem during the time of preparation.

Another problem which we solved in a unique way was the question of how much food to prepare. We use a system of colored slips, or tickets, which the pupils purchase from the cashiers in the morning before school. These colored slips are cut from bristol board about one and three-fourths inches by one-half inch. Each color represents a dish that we are serving that day. For example, our day's lunch sheet may read:

Black—Meat pie ..... .08
Orange—Scalloped eggs and peas.... .05
Yellow—Date and nut sandwiches.... .03
White—Plain sandwiches ..... .01
Green—Cabbage and carrot salad.... .05
Blue—Lettuce salad ..... .05
Pink—Apple crisp ..... .05

The cashiers have a record of the number of various colored tickets in their ticket box, so by subtracting the number left after selling is over, we can tell how many servings of each dish we will need to prepare. At noon these tickets are exchanged for the various foods which they represent.

In the regular class period the cashiers fix trays for teachers who may leave their orders on a slip provided in the office and thus avoid waiting in line at noon. These orders may read:

Miss Anderson—1 black, 1 green, 2 yellow, 1 coffee.

Mr. Kimball—1 black, 1 green, 1 milk. Or if they would like a special food it may read:

Miss Young—1 poached egg, 2 slices buttered toast, 1 ice cream.

Mr. Gibson— 1 baked potato, 1 green, 1 pink, 1 cocoa.

One group, called SPECIAL consults the tray sheet and prepares and arranges the special trays. These two groups—cashier and special, stay at noon and serve their trays and take charge of the ice cream and frost sticks we have for sale. A local ice cream company has installed a two-hole Frigidaire container and keeps it supplied. The profit from this enables us to serve other foods at lower prices and to pay for the services of a woman who washes all of the dishes after noon.

Each week from five to seven girls, depending upon the number we are serving, stay at noons and serve the food, cafeteria style. These girls receive a twenty-cent lunch for their services. They scrape and stack all of the dishes after the lunch period and leave the laboratory orderly for the dish washer. The cashiers count and arrange the tickets for the next day's lunch, make out their market order, and check in their money. The tickets, menu and tray sheets, and money box with change for tomorrow's lunch is taken to the principal's office where they are left until time to sell the next morning.

Well-prepared and nutritious food is our aim. Since each girl remains at each task one week, she gets a variety of experiences in that duty. EXTRA PERIOD gives experience in preparing vegetables, mixing cakes, shaping rolls, mixing meat loaf, etc. MENU gives experience in planning lunches and making out quantity recipes for these lunches.

Another use to which our cafeteria is put is extra-curricular. Each Home Room arranges a social event for each six-week period, and many of these are put on in the cafeteria. The serving equipment can be used if left in order for the next day. The serving rooms can be used, not only for serving, but for games and programs. Occasionally these groups have food prepared by the cafeteria class. This is sold at a slight profit.

Special groups are also served during the time of year when our crowds are smaller. The boys' Numeral Club meets during the noon intermission. They make arrangements for a special lunch, which is prepared and served to them on trays in a near-by class room. Even the School Board has occasional noon meetings at which time their lunch is prepared and sent down to the office of the superintendent. These extra luncheons add interest for the class.

Due to our ticket system, we have managed to come out with a small profit each year. We have also been able to replenish our breakable equipment and add a few new pieces.

Many of the girls who enroll in this course are able to get positions in local tea rooms and cafeterias so it is of vocational value as well as fulfilling a present need.

FOOD FOR FIFTY is a new book on quantity cooking that has recently come to our attention. It is written by Sina F. Fowler and Bessie Brooks West, both connected with the Institutional Management Department of Kansas State College and contains "institutional formulae" or recipes for a great number of foods. The book is published by John Wiley & Sons and costs $3.00.

The Organization and Management of the Cleveland Heights Public School Cafeteria System

PART TWO

By Mary Farnum

Director of Cafeterias

EACH manager makes out the menus for the schools in her group one week in advance and sends them to the cafeteria office on Thursday to be checked by the director. In this way, any suggestions or corrections may be made before Monday. Menus in all schools are changed daily except the standard items, such as milk, ice cream, fruit juices, and cookies. The present trend is to have the menus as simplified as possible, since this results in lowered labor costs, less waste from left over food, and greater daily menu variety over a period of time. All menus are planned to be dietetically correct for the children of each school age group. No "hot dogs", "hamburgers", pop, coffee, or tea are served. No candy of any kind is served in the elementary schools, and only simple milk chocolate and nut bars are served in the high schools. The candy is not displayed or sold until after the hot lunch line. All cookies sold are made in the cafeteria kitchens with the exception of graham crackers, which are very popular with the smaller children. In the elementary schools, no child is permitted to buy any dessert unless she has a hot or main dish on her tray. A daily special is served at 12c to 15c in the elementary schools, and 15c to 17c in the high schools. The items offered on the specials are choices from the regular a la carte menu but in specified combinations and sold at 1c to 4c less than regular price of single items. The following table shows the size portions served and the prices charged.

SCHEDULE OF SIZE OF PORTIONS AND PRICES CHARGED

Items	Size of portion	Selling price
Tomato juice	4 oz.	$ .03
Soup (2 crackers free)	8 oz.	.04*
Milk	½ pt.	.04
Meat	4 oz.	.10
Meat combination	6 oz.	.08
Meat substitute	6 oz.	.06
Vegetables	4 oz.	.05
Bread	2 slices	.01
Potatoes	No. 10 dipper	.05
Gravy	2 oz.	free
Butter	1/48 lb.	.01
Salads	½ cup, head lettuce	.08
Salad dressings	choice, self serve	free
Sandwiches	2 slices, lettuce	.05
Cookies	3 ¼ in. diameter	.01
Ice cream	8 to qt.	.05
All desserts	4 oz.	.05
Pie (high schools only)	6 to 9¾ in. pie	.07
Cake	1/12—9 in. 2 layer	.05

* In high schools, 5c.

Standardized recipes are furnished all the cooks. Each recipe is cost priced, and the size and number of servings determined before the recipe is used. Reliable scales, thermometers, standardized measuring cups and spoons, and temperature controlled ovens are used. The cooks are furnished butter, whole milk, fresh and only the highest quality ingredients for these recipes. This procedure insures daily standard products of uniform quality and size. All food served is tasted by the managers before being placed on the serving counters, thus helping to maintain and check the quality of the food sold. Standardized spoons and serving dippers are used at the steam tables. No food is sold the second day in the same form. For example, cake is made over into crumb cookies or cottage pudding; thus, each time an item is served, none of the original freshness or flavor is lost. Everything sold is prepared in the cafeteria kitchens except the bread, crackers and ice cream. All crackers and cold sandwiches are wrapped in wax paper or placed in glassine bags. The Director of Cafeterias visits a different school cafeteria each day at noon to see that the standards are maintained and make any suggestions necessary. In this way, it is possible to have a constant check on existing conditions in each cafeteria.

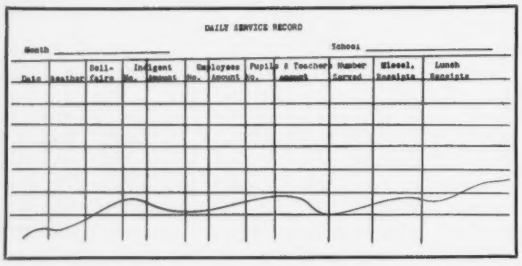
The managers keep a perpetual inventory of everything bought and used every day for each school in her group. At the end of school month, the cash value is figured for the monthly operating statement, providing an accurate record of each item used, and cutting down the possibility of losses and leaks. All supplies received are checked upon arrival, by the managers, for quality, correct weight, sanitary containers, and correct price, before signing the delivery slip. Failure of any firm to meet these requirements is cause for cancellation of our contract.

Employees in each department are given daily work sheets, giving amount of each item to prepare along with the recipe for that item. Daily record is kept by the employee of the raw materials used, number of servings prepared, sold, and left over. From these records the manager makes up her perpetual inventory and a daily counter service sheet which is of great value over a period of time to determine which menu combinations are popular, and in what amounts to prepare any item the next time it is used on the menu.

A daily record is kept of the weather, the number of customers served, the number of indigents served, number of pupils and teacher cashiers served, cost of their meals, and the amount of cash received.

In the high school cafeterias there is a student checker and teacher cashier. Checking machines were purchased which are especially constructed so that the daily total can only be cleared by the manager's key, and the monthly accumulative total can only be cleared by the supervisor's key. Each cashier is given a certain amount of change at the beginning of each lunch period. At the end of the period, he counts out that amount of change for the next cashier, and totals up the amount of the receipts he has taken in. The manager then takes off the total on the machine and the cashier writes his name, date and amount of cash on this tape. The variations between the amount of cash received and recorded is negligible under this set up. The receipts and the tape are then placed in an individual bag and later checked by the manager. The cash receipts are collected each Friday by Brinks express. One copy of the deposit slip is sent to the cafeteria office and two copies to the bank, which, in turn, sends the official receipt to the Board of Education. The receipts are deposited in a special cafeteria fund in the Board of Education account and not with the rest of the school funds. Payrolls are sent to the Board of Education from the cafeteria office each week for the issuance of payroll checks to the cafeteria employees from the cafeteria fund.

In the elementary schools, where the volume of business does not warrant purchasing expensive machines, such as are used in the high schools, a "daily sales report" is used to record the amount of each sale. The cashier says aloud the amount of the sale and a pupil checker writes the amount of each sale in a separate space. At the end of the day, the head cook in the elementary school records at the top of the sheet the number of pupils served and the actual amount of cash taken in. These reports are then sent to the cafeteria office where a third person counts the number served and checks on the adding machine the total of sales recorded on the sheet. The director checks these sheets each week, and it is immediately apparent if any intentional or unintentional errors are made. Since the


DAILY SERVICE RECORD

Month _____ School _____

Date	Weather	Bell-fairs	Indigent No.	Indigent Amount	Employees No.	Employees Amount	Pupils & Teachers No.	Pupils & Teachers Amount	Number Served	Miscel. Receipts	Lunch Receipts

This is a sample of the daily service record used by the lunch room managers. At the right is the form used for standard recipes and below a copy of the daily counter sheet.

CLEVELAND HEIGHTS SCHOOL CAFETERIAS - STANDARD RECIPE

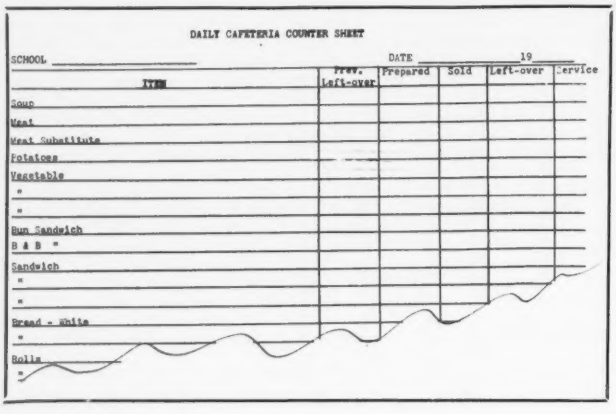
Number Servings 80 Total Cost $2.26

Amount in one Serving 1 cup TOMATO BISQUE SOUP 5 gal. Cost per Serving .026

INGREDIENTS	AMOUNT	WEIGHT	UNIT COST	TOTAL COST	CALORIES
Tomato Puree # 10	2 cans		$.46	$ .92	
Sugar	½ cup		.05 lb.	.01	
Soda	4 tsp.		.05 lb	.002	
Onions		1 lb.	.032	.032	
Cloves	20			.02	
Parsley	1 bunch		.05	.05	
Bay Leaf	10			.01	
Stale Bread Crumbs	2 qts.		.14 loaf	.14	
Milk	3 gals.		.30	.90	
Butter		¼ lb	.24	.18	
Salt	6 Tb.				
Directions on back.				$ 2.264	

person who starts these records does not finish them, and a third person makes the final check, it is almost impossible to alter or "fix" these records.

Each school has a definite amount of petty cash to use for emergency purposes. Each purchase is recorded in a petty cash book and a written receipt is required for each purchase. These books are sent into the cafeteria office at the end of each month to be checked, and the amount of money spent is then replaced for use the following month.


DAILY CAFETERIA COUNTER SHEET

SCHOOL _____ DATE _____ 19____

ITEM	Prev. Left-over	Prepared	Sold	Left-over	Service
Soup					
Meat					
Meat Substitute					
Potatoes					
Vegetable					
"					
"					
Bun Sandwich					
B & B "					
Sandwich					
"					
"					
Bread - White					
"					
Rolls					
"					

The invoices for the purchases of each cafeteria are sent into the cafeteria office each Friday, after they have been checked and signed for payment by the managers. These are then entered into the cafeteria department office records, and the cafeteria bills vouchered and sent to the Board of Education for payment. All bills are paid twice a month in order to take advantage of any discounts offered and to establish and maintain a good credit rating, which is always a good business asset.

At the end of each calendar month, a complete operating statement for each cafeteria and the cafeteria department as a whole is compiled and presented to the Board of Education for approval. The report shows the receipts, food cost, total salaries, kitchen managers' and administrative salaries, general expense, depreciation reserve, and the surplus or deficit for the current month. Beside each cost figure appears the percentage figure for that cost, in order to evaluate correctly the various monthly costs and expenditures. In addition, the monthly report shows the cumulative receipts, food costs, gross profit, total expense, and surplus or deficit for each cafeteria. Other interesting figures are included such as: the total number served, average check and the number of days receipts. The number of days wages are paid is also shown since, due to school holidays, in some months the number of days receipts were received is less than the number of days wages were paid.

Physical inventory is taken twice a year. Space is provided to show the amount of each item on hand, the loss since the last inventory was taken, and the amount needed for the next semester. A description of each article is given; the unit price and the total price shown. The record is taken by groups, i.e., aluminum ware, china, silverware, etc., and the total invested in each group totaled. From this total, the amount of replacement reserve can be figured by dividing the total by the number of years expected life of the equipment and pro-rating that amount over the number of operating periods in the school year. For example, the expected life of aluminum ware is 20 years and the number of operating periods in a school year is ten. Therefore the total amount invested in aluminum ware should be divided by 20 and then by 10 to find the monthly replacement cost.

All equipment is purchased by specifications and bid by the cafeteria director. The present aim is to standardize all equipment in order to simplify and improve purchases. Constant effort is made to keep all equipment in good condition and periodic checkups, oiling, and repairs are made.

A record card for large equipment is kept to show the history of the purchase, repair, and replacement as needed. Chipped or cracked china and glassware are discarded immediately because they are both unsightly and unsanitary.

The cafeteria dining rooms are above average in attractiveness. Portable screens called "disposal screens" have been built in the cafeteria dining rooms to shield from view of the children eating and those waiting in line, the unappetizing but necessary cleaning up activities. An opening at table height, large enough to accommodate a tray, is cut in the center of one of the screen panels. Each child passes his tray with the soiled dishes through this opening instead of piling and scraping the soiled dishes himself as is so often done in school cafeterias. Several student employees working behind this screen, sort and stack the dishes, silverware and trays in preparation for washing.

The surplus accumulated since the beginning of the new system has been turned back into the cafeterias as rapidly as possible in several ways: to lower food costs and increase the size of servings, yearly increase of employees' wages with a monthly bonus, and for the replacement of old equipment and addition of new equipment to improve the efficiency of the cafeterias and attractiveness of the food service.

The present Cleveland Heights School Cafeteria Department under the direction of a Home Economics trained director with home economics trained managers as assistants, is completely self supporting, each school cafeteria operating as a self supporting unit of the whole. Well cooked, wholesome food, prepared under sanitary conditions, of highest quality ingredients is attractively served to the children of Cleveland Heights at low prices and in pleasant surroundings, thus fulfilling its purpose in the community.

You never taste the Baking Powder in ROYAL Biscuits

Only 1⅛¢ worth of Royal for a batch of feather-light biscuits!

Add up on the blackboard the cost of the ingredients needed for a batch of biscuits. Then emphasize to your class how little the Royal Baking Powder costs. Actually only 1⅛¢! Amazingly little, isn't it . . . especially for the finer flavor and texture you are sure to get with this superior baking powder? Why risk poor-quality baked foods by using a doubtful baking powder when it costs so little to use the best?

ROYAL is made with Cream of Tartar, a pure grape product that insures a sweet and delicate flavor

YOUR NEXT CLASS LESSON on biscuits will be doubly effective if you stress this important point:

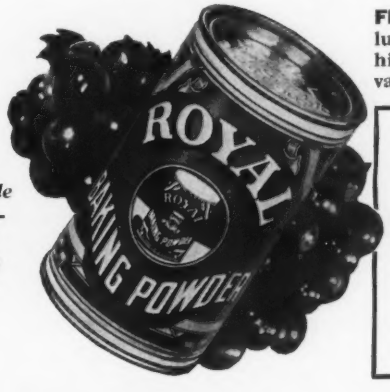
The real test of fine biscuits is—FLAVOR!

Biscuits may come from the oven a tempting golden brown . . . flaky and tender—but no one will want to eat them if they have the slightest *taste of baking powder.*

One sure way to have biscuits with a sweet and delicate flavor is to use baking powder made with Cream of Tartar—Royal.

Cream of Tartar, you know, comes from luscious, ripe grapes. And it's this pure fruit product in Royal that gives such perfect flavor to everything you bake.

And remember—next time you order baking powder—that Royal is the only nationally known baking powder made with a pure fruit product. Insist on this fine Cream of Tartar baking powder for your classroom demonstrations. And tell your pupils that fine home baking requires the best baking powder—Royal!



ROYAL is the only nationally distributed baking powder that is made with a pure fruit product—Cream of Tartar—derived from luscious, juice-heavy grapes.

FREE—ROYAL COOK BOOK!—Beautifully illustrated. Basic recipes, rules for fine cakemaking, hints on handling doughs and batters, and other valuable helps for teachers. Mail coupon.

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CHATHAM

gives you ALL the FACTS on this unique label

CHATHAM sensed that women were tired of the "guesswork" involved in buying textiles . . . AND CHATHAM DID SOMETHING ABOUT IT! With the hearty support of home economists, but against the sincere misgivings of many merchants, Chatham put on the market the "Specification" Blanket . . . with *all* the facts right on the label . . .

This is no longer news. Now leading textile manufacturers know that women prefer to buy *plainly* labeled goods.

Devised in accordance with recommendations of U. S. Bureau of Home Economics, "Specification" Labels are available for study and discussion among home economist groups.

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Please send me.....FREE Sets of Chatham's famous "Specification" Labels.

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Book Reviews

CHEMISTRY OF FOOD AND NUTRITION. Fifth edition. By Henry C. Sherman, New York. The Macmillan Company, 1937, 640 pp., $3.00.

This standard textbook has been completely rewritten. New material on practically every subject is included from the enlarged introduction to the revised food tables.

Two new chapters have been added—*Food Economics in the Light of the Newer Chemistry of Nutrition* discusses the possible adaptation of food chemistry to the problems of crop and animal production, and national nutrition. *Food Chemistry and Human Progress* "attempts to sketch certain phases of this recent and current development of the chemistry of food and nutrition as a guide to the furtherance of human welfare and progress through the more scientific use of food."

The changes and revisions in the text are too numerous to enumerate here; every home economist who has come to depend upon this book as an authentic source of information will want this extensively revised edition.

A few of the pertinent points of general interest that may be mentioned are that the distinction between dietary studies and dietary standards should be made . . . Dietary studies are records of *facts,* dietary standards are *judgments,* therefore, too much weight should not be attached to any so-called dietary standards. . . . Present day knowledge of the influence of food upon nutrition and well being indicate that intelligent education of the palate to relish the best kinds and relative amounts of food is of more importance than any previous generation could have understood. . . . Eggs are classed with protective foods. . . . In the tables of food composition white bread only is listed, graham and whole wheat are considered synonymous with white bread, and several new foods are listed.

Lulu Graves.

STUDY GUIDE TO PROBLEMS OF FABRICS AND DRESS, by Lucy Rathbone and Elizabeth Tarpley. Houghton Mifflin Company, New York. 1937. Paper bound, 137 pp. 52c.

Planned as a study guide to use with the text book, *Fabrics and Dress,* by the same authors, or with any other recent high school text book in clothing and textiles, this contains well planned and selected problems for individual or class study. Subjects included are personal grooming, wardrobe selection, sewing equipment, clothing construction, fabric selection, dress design, selection of shoes, hosiery, hats, etc.—every phase of a well rounded high school course. Pages are punched and perforated for note books.

YOUR CLOTHES AND PERSONALITY, by Mildred Graves Ryan. D. Appleton- Century Co., New York. 1937. 389 pp. $1.72.

This is a text book for a two-year course in clothing for high school, but stressing rather clothes appreciation and the effect of clothes on personality, or to put it another way, the reflection of personality through proper selection of clothes. Construction, of course, is included as a means of developing high standards and ideals of clothing selection. The book is based on a course developed by Miss Graves while teaching in Port Chester, New York, High School and the material presented has been put into actual practice and found practical and workable. Written in an informal manner, the contents are put together in an interesting way and the book is exceptionally well illustrated with examples of old and modern styles and fashions. Included is a well worked out chart on historical costume presenting the evolution of costume from early Egyptian times down to the present day. Another unique feature is the 28-page section of full page fashion plates showing a collection of clothes selected for various occasions. There is also an excellent bibliography of material for clothing teachers and students.

LABORATORY HANDBOOK FOR DIETETICS, by Mary Swartz Rose, Macmillan Company, New York. 4th edition, 1937. $3.00.

The present edition of this well known and much used handbook will be welcomed by dietitians and students. Originally published in 1912, it has proved an invaluable aid in both the teaching and practice of dietetics. This new edition has been enlarged and revised in accord with later day developments in "the importance of mineral elements and vitamins as controlling factors in nutrition, and a corresponding activity in the analysis of foods for these dietary essentials". It should hardly be necessary to mention the value of the book as a handbook in the calculation of food values and requirements, or the excellent reference tables on 100 calorie portions of foods, percentage composition of various food elements, etc. The series of problems in dietary calculations have been revised and brought up to date. There is also an excellent chapter on equipment for a modern dietetics laboratory.

LEARNING TO BE GOOD PARENTS, by Eleanor Saltzman. Manthorne & Burack, Inc. Boston, 1937. Paper bound, 55 pp. 25c. Special prices for quantity.

Miss Saltzman has for many years been connected with child study and parent education at the Iowa Child Welfare Research Station of the State University.

This is a collection of talks planned by the author for parents of limited education and is therefore expressed in simple language. While essentially a booklet for parent groups, much of the material would be equally useful in high school classes in family relationships and child care.

FROM WHEAT TO FLOUR, by Josephine B. Beardsley. The Wheat Flour Institute, Chicago, Illinois. 1937, 40 pp.

An interestingly written history of wheat from its earliest use in primitive times to our present-day wheat flour. Well illustrated with many drawings by Margaret Fairman and by actual photographs of modern wheat fields and milling processes, the book contains much material of historical value and interest. Good as reference.

ART ACTIVITIES IN THE MODERN SCHOOL, by Florence W. Nicholas, Nellie C. Mawhood and Mabel B. Trilling. The Macmillan Company, New York, 1937. 376 pp. $3.25.

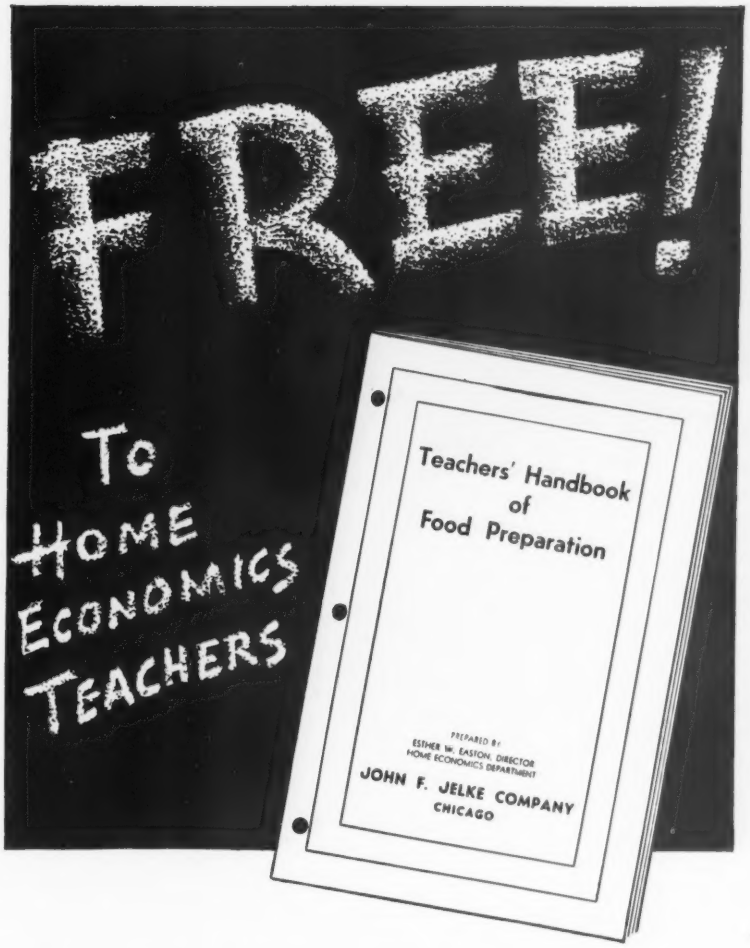
This is, we believe, the first book planned as a textbook in art methods for prospective art teachers as well as for those already engaged in teaching art. It deals with *methods* only, presuming that students in special schools or teacher training institutions will already have had the fundamental art training necessary. The authors are well qualified for the task they set themselves—Miss Nicholas holds the position of docent in the Department of Fine Arts, Carnegie Institute; Miss Mawhood supervises art in the public schools of Richmond, Indiana; and Miss Trilling is professor of Home Economics Education at Carnegie Institute of Technology.

The book is written in thirteen units and is well illustrated with photographs of work done by children in various schools.

The first unit is a discussion of the essential values of art education as they affect the grade or junior high school pupil,—the place of art in the school curriculum and the general objectives of art education. Others deal with the selection of art experiences; the technique of art lessons, creative work in illustration, etc. Each unit is followed by a group of questions for class discussion and a list of suggestions for parallel reading.

THE LITTLE THINGS IN LIFE, by Barnett Sure, Ph.D. D. Appleton-Century Company, New York, 1937. 327 pp. $2.50.

Another book on vitamins, hormones, minerals and other "minute essentials" for good health and nutrition. Dr. Sure points out, in non-technical language, the importance of having sufficient copper, manganese, iron and other minerals in the diet; of the part good digestion plays in nutrition; the value of hormones and the part they play in physical well-being.



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Home Economics in the Home

Practical Carry-Over Plan For Foods Classes

By Hester Clark

York, Nebraska

IF home economics training is to function in the home, school work should correlate with the natural setting of the girl's home. One way to make this integration is through the food work. Especially can this home relationship be established in the serving of meals.

Because the school in which I am working has no dining room, it has been necessary to develop another plan by which the girls could profit from the classroom discussion of meal service. After the classroom teaching concerning the breakfast, luncheon, and dinner units, the girls then actually serve the meals at home to their own families. This has been found to be a more natural situation than trying to prepare and serve meals in the food laboratory. In fact, after trying this plan for several years I am convinced that it has certain advantages over the laboratory service of meals. For instance, since each girl plans, prepares, and serves an entire meal without help she learns to take the responsibility for the entire job herself. The work of preparation of the meal served at school is necessarily divided among four or five girls working in a group. Each girl, therefore, has only a certain part of the meal for which she is responsible. She loses the opportunity of completely managing all of the work and time concerned in meal preparation. What is more important, she loses the natural home situation where meals are actually served to a real family.

My experience has been with girls of eighth, ninth, and tenth grade classes. The breakfast, luncheon, and dinner units are studied at school with the customary laboratory work supplemented by reference readings and discussion periods. At the conclusion of a four or five weeks study each girl then plans, prepares, and serves a meal at home to the family.

Our home economics department consists (1936-37) of 164 students. Meal preparation is taught in each class. The breakfast unit is taught in the eighth grade; the luncheon unit in the ninth and the dinner unit in the advanced classes. The advanced course includes tenth, eleventh, and twelfth grade girls and is elective. The eighth and ninth grade courses are required. We give all the essentials in the required course, although the complete work covers the three years.

Cooperation in the community has been especially good. Only once was there any difficulty with the parents and that proved to be a matter of cost; when I explained that the girl need spend no more for the meal than the mother would normally spend the difficulty cleared up at once. However the next year, I included in the letter to the mothers a statement covering that point. Mothers are, on the whole, very much pleased with the project.

Plans are made by the girl at school under supervision and are carefully checked by the teacher before the girl attempts to prepare the meal at home. This work consists of planning a well balanced menu and making a complete market order. Definite organization of the work and time for accomplishing the meal preparation are also included in the plans. After the teacher and the girl have had a conference, the girl works alone in the kitchen at home. The mothers are usually very glad to cooperate in this matter. A note from the teacher to the mother, telling her of the whole project, at the time of the first meal to be prepared is helpful in establishing cooperation. It is essential to tell her that you wish her to write a report when the meal is finished. Suggest that she write on the reverse side of the letter.

Of course the one disadvantage is that a teacher cannot see how the girl works at home. However, a complete, well written report from each girl gives the teacher the general impression of the success of the meal. The report includes a detailed description of each dish as to texture, taste, and appearance. Another phase of the report includes a discussion of the table setting and table service. The pupil also criticizes constructively the manner in which her plans for work and time helped her. She also states in her report how she might better organize her plans for the next meal to be served. This report, written by the girl, gives the teacher a clear understanding of the success of the problem. As an additional check the mother, too, writes a report of the venture.

From these reports of mothers, I have received my inspiration to keep up this method of teaching meal service. Many mothers have said that their girls like to cook now, and that they had hardly been able to get them into the kitchen before. Others say that the daughter takes responsibility better, that she cooperates more willingly, and that the mother, herself, is glad for a vacation from cooking.

Parents' Night

Ada H. Pullan
Hartford, Connecticut

Bulkeley High School is a very beautiful building with an enrollment of about 1800 pupils. This past year a most interesting Parents' Night was instituted at which there were about 2000 guests.

For entertainment two simultaneous programs were arranged. One was music by a combined school Glee Club and orchestra in the auditorium, and a sports program in the gymnasium. Tickets were issued which admitted pupils accompanied by parents to either program.

From nine to ten o'clock eighteen regular classes of day routine were in session. These were selected by Principal Feingold because of their visual value. Included were classes in English, verse, speaking, mathematics, chemistry, physics, physiology, art, woodworking, mechanical drawing, food and clothing.

The entire faculty were in their Home Rooms. Student proctors acted as guides to conduct guests through the building.

Illustrative material was used in the rooms to suggest the type of work done there. The selection of a time when flowers were plentiful was fortunate and each room showed its own arrangement.

In the Clothing Department there was a display of completed garments with a class working on the project of remodeling. One group was rehanging a dress, another fitting the side seams of a skirt and one group pressing a garment after ripping. Other girls were working at the sewing machine. In this formation, it was possible to display a number of phases that take place in any clothing class. The guests were conducted through the room, stopping to observe, ask questions and be introduced to the instructor.

The project of the Food Class was "Making of Cookies." This was selected because it fitted into the regular program of types in cake making. During the day a large variety of cookies were made to serve to the guests. For the evening, the class was divided into groups. One rolled and cut cookies that were made and chilled ahead of time. One sliced ice-box cookies; one group made dropped brownies, thus including four types of cookies. One other group acted as hostess to serve the guests.

The fragrance of the cookies permeated the entire building to the extent that the room was filled with guests for the duration of the class. The supply of cookies was consumed in a very short time and guests stood in line to sample the product as it came from the ovens. The entire class worked in such perfect harmony that no instruction was necessary from the teacher, leaving her free to meet the parents.

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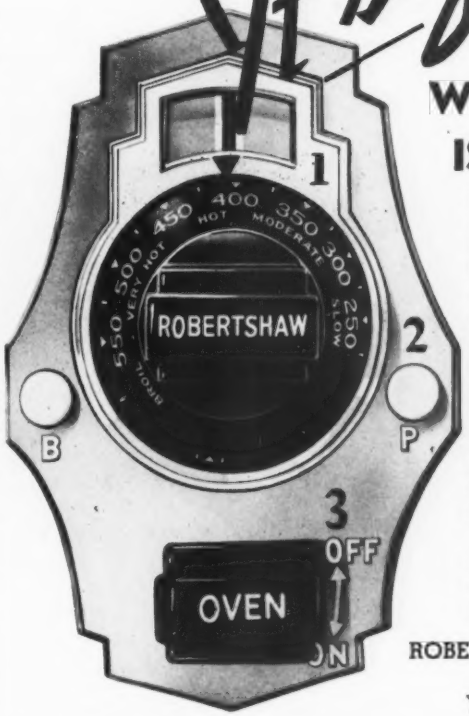

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Needles and Pins

By Gretchen Howell
East Texas State Teachers College
Commerce, Texas

IT is difficult to imagine getting along without needles. Yet, there was a time when needles such as we use today were unknown. Indeed, steel needles were not made until about 1400 A.D. or shortly before. However, the needle is not a modern invention. In fact, the progress of man may be traced by his needles. Primitive man used needles of thorn; later man used needles of fish, ornamental bones and ivory; man of the age of metal made his needles of bronze which gradually replaced the crude ones of bone and thorn. Primitive peoples today still use these crude needles.

Bronze needles have been found in Egyptian tombs; while in Peruvian tombs needles of gold and silver have been unearthed. The Egyptians learned to make steel needles from the Moors. However, the Chinese claim to have made needles of steel many years before the Moors introduced them into Europe. Steel needles were first made in Nurenberg, later Spain became noted for her needles; while today English steel wire is used for most of the better grade steel needles.

The earliest metal needles were made without eyes, the thread being tied to the large end. When the first needle maker, a Moor, opened his shop in London, he made such fine needles that the people thought he was possessed of evil spirits to help them!

Before the Revolutionary War people in America bought their needles in England. During the war, however, they had to manufacture their own needles and continued to do so. Now lorge quantities are made in the United States, especially in New England.

There are many forms of needles besides the common sewing variety. The machine needle has the eye at the point. The crochet needle has the hook at the point. The tape needle is of different lengths, with a blunt point and a large eye. Millinery needles are longer than the common sewing needle. There are also needles for surgeons, bookbinders, upholsterers, embroiderers, lace makers, leather workers, sail makers, knitters, packers and so on.

In the trade, manufacturers divide common sewing needles into three styles: ground-downs, betweens, and sharps. "Ground-downs" are short and blunt. "Betweens" are somewhat shorter and sharper in the point. The "sharps" are longer and narrower at the point.

The manufacturing process is very complicated for so small an object. Little would one think that a small needle has passed through the hands of nearly a score of workers and undergone at least twenty processes before it reaches the consumer. Steel needles are made of fine wire. A piece of this wire is cut long enough for two needles, heated a dull red and straightened. The two ends are pointed on a grind-stone after which the piece of wire is flattened in the middle. During the flattening process the eyes are pierced and the two needles are separated. To make them brittle they are covered with oil and heated. This is called *tempering.* For polishing they are placed in emery powder and sand and rolled to make them bright and smooth.

The next process is sorting and "evening". When all needles of the same size are placed together they are ready to be packed. Twenty-five are placed in a paper and one dozen in a package. Some packages contain assorted sizes, which are indicated by numbers. The largest are 2/0, while No. 10 is usually suitable for the finest work. No. 7 or No. 8 is recommended for general sewing.

Needles for older persons and others whose sight is no longer good are available. These have the eye slit so that the thread may be inserted.

When one thinks of the amount of work necessary in making a needle, one has better appreciation for this useful little instrument. It is no wonder that Gam-

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mer Gurton tore up the place until he found his needle. Without needles clothing would be of a different style. There would be no embroidery or lace. The surgeon would be without means of sewing up the incision he so deftly makes. And, more than all, there would be no women's sewing circle. In fact, we would soon fall to pieces; so hail to the needle that holds us together.

Pins

PINS for personal use are no new thing. They were not always so cheap as now, however. In fact, the people of England were once taxed to provide their queen with money for pins. Some say that the term "pin money" thus originated. Another legend tells of selling pins on two days of each year: January 1st and 2nd. The ladies saved their money for this event and such savings came to be known as "pin money." Later, any money saved for miscellaneous use was called "pin money".

The earliest pins were thorns, bones of fish, pine needles, and any object of similar nature that could be found. As civilization progressed, so also did the use of pins. Women learned to sharpen the points and to smooth the surfaces. Egyptian tombs have disclosed pins of bronze and copper highly decorated and some six to eight inches long.

Metal pins in Europe were first made in the 15th century. The first ones were very highly sought but very expensive since they were made of precious metals. The immediate predecessor of the modern pin was made of brass wire. The head was a coil of fine wire which was twisted around one end of the shank to which it was soldered. Great-grandmother's jewel case contained some of these pins which many people still remember. This pin was made by hand and necessitated many manipulations. The story is told that one of the ladies in the court of Henry VIII cut her finger on one of the coils whereupon the king said that pins should be made henceforth in one piece.

It is said that 75,000,000 gross of toilet pins are manufactured in the United States alone each year. Until 1800 all pins that were sold in the United States were imported. In 1775 a prize was offered for the first gross of American pins. Soon activity was strong in the United States. Timothy Harris, an Englishman, had made solid-headed pins in 1797 by moulding the head. In 1824 an American, Lemuel Wright, patented in England a machine for the making of pins of a single piece of wire. His machine has been greatly improved, but he is credited with having made the first step in modern pin manufacture. One of the outstanding early American pin manufacturers was Dr. John Ireland Howe, a physician, who established a company in 1831 in Derby, Connecticut.

The modern pin is manufactured with

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incredible rapidity and ingenuity. The machine is fed with brass, iron, or steel wire from a spool. The wire is straightened, cut, and grasped by jaws beyond which a bit of wire projects. A die flattens this bit of wire into a head. The pin points are then filed to sharpness, after which only the polishing remains. This is done by boiling the pins for several hours in a solution of tin after which they are washed and rolled in a cylinder with bran and sawdust.

The process of sticking the pins into the paper is as fascinating as the manufacturing process. The pins are thrust into the paper which is crimped at the same time, the pins passing along in a hopper to a plate with holes where they meet the paper as they are tapped.

There are of course many kinds of pins: some are mere variations of pins used formerly. The safety pin, for instance, dates back to the ancient Egyptian, Roman, and Greek times. Then they were made of gold and silver in somewhat the same shape as those we know. Some were studded with jewels and may be seen in museums today.

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News Notes

Announcement has been made of a new Household Research Center in Milwaukee, with Mrs. Sylvia Shiras as the home economist in charge. This center is an extension of the Research Department of Household Finance Corporation, with headquarters in Chicago. The Department produces consumer education publications and films which are used by many different organizations throughout the country. It is believed that at the Research Center, consumer requirements for such helps will be discovered at first hand, enabling the department to provide more practical and usable materials. Mrs. Shiras will hold conferences on personal family problems relating to money management and better buymanship, and will be glad to help those planning "consumer" programs for a club or other group. A library of booklets and reference materials, exhibits, and several films and moving pictures has been set up and is available.

Mrs. Shiras was formerly State Associate Director in charge of Home Economics in the Minnesota Rural Rehabilitation program. Previously, as home demonstration agent, she was in charge of the educational work at the Home Center in Minneapolis. She has also held positions as Home Demonstration agent in Michigan and in Duluth. She is a graduate of Stout Institute, with advanced work at Columbia University. She is also co-author of "Mrs. Consumer's Dollar."

Mrs. Thelma Reinke Lison has joined the Gardner Advertising Company, of St. Louis, and will have charge of the very new and modern gas and electric kitchens that have been set up. Mrs. Lison is responsible for the scientific accuracy of the radio programs broadcast four times a week direct from these kitchens. Mrs. Lison received her master's degree in home economics from Columbia University, and has been with the Gardner Company nine years.

The Home Economics Summer School at Drexel Institute of Technology, Philadelphia, enjoyed a most successful term, with an enrollment of one hundred students. Twenty-five of these were graduate students, many of them working toward their master's degree in Home Economics.

The conference plan of study inaugurated this summer proved to be of great value, and will be continued next year. Among the speakers who addressed the conference groups were Mrs. Anna L. Green, Chief, Home Economics Education, Pennsylvania Department of Public

Instruction; Mrs. Ralph Borsodi, Civic Leader of Suffern, N. Y. Dr. Mary De Garmo Bryan, Head, Institution Management Division, Teachers College, Columbia University; and Mrs. Mildred Perkins, Supervisor, Home Demonstrations, Philadelphia Electric Company.

Professor Ardenia Chapman, of the faculty of Drexel Institute of Technology, was the Director of the Summer School.

In the School of Home Economics, Drexel Institute of Technology, three instructors have been added to the staff. Sally Beth Moore, graduate of Chicago University with her Master's Degree from the University of Minnesota, will direct the Drexel Nursery School and teach Child Care and Development. Miss Moore has taught at Ward Belmont College and the University of Texas, and held teaching fellowships at Chicago and Minnesota Universities.

Natalie A. Edwards, Home Economist with the Metropolitan Edison Company, Reading, has been appointed Instructor in Home Economics. Miss Edwards, a graduate of the Drexel School of Home Economics, will have charge of the Home Management House.

Melba La Hue, a graduate of the University of Minnesota, has been appointed Instructor in Home Economics and Assistant Dietitian of the college. For the past two years Miss La Hue has been director of the tearoom and grill at Carleton College.

Milwaukee-Downer College is offering a new textile course for 1937-38 that will include Saturday apprentice work in selling textiles and clothing in a large department store. Hazel Rennoe of Milwaukee-Downer and Gertrude Sykes, head of the personnel department of the store are in charge of the work.

Mary Ellen Weathersby and Emily Stribling have been appointed full time itinerant teacher trainers to assist the Mississippi state supervisor of homemaking education.

A course in "how to apply lipstick and rouge correctly" is being taught high school girls in Albany, New York, who are enrolled in the new sales and retail selling course offered in the day and evening high schools. The subject is listed as "personal regimen" but is commonly referred to by the pupils as "P.A." (personal appearance). In commenting on the reasons for the course, Superintendent Coulson pointed out that while the students are not encouraged to use cosmetics, they are instructed in their proper use. He feels that knowledge of how to sell is only part of the requisite for success in selling—personality and appearance must be given full consideration and for that reason students are taught how to make and present a pleasing appearance.

New Booklets

Silk Stocking Shopping, issued by Montgomery Ward offers excellent and timely suggestions on the buying and care of silk stockings, as well as information on the history and manufacture of this, to us, important article of clothing. It is well put together and attractively illustrated—a good booklet for consumer buying classes.

Good Nutrition in Practice, by Mary Hemmersbaugh, Director of School Cafeterias in Cleveland, Ohio.

This is distributed by the National Dairy Council and should prove of much help to all those interested in school cafeteria work. It contains, in addition to a statement of the qualifications for good school cafeteria managership, suggested menus for budget specials such as have been used successfully in the Cleveland schools.

Accidents and Opportunity, an illustrated booklet published by the U. S. Department of Commerce, Washington, D. C., pointing out the reasons for most of the accidents that take a toll of over 100,000 deaths a year in this country. Good for helping in the school safety campaign. Copies may be obtained from the Superintendent of Documents, Washington, D. C. or from the Department of Commerce.

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Planning the Student Tea

By Lillian N. Reid

Senior High School,
San Bernardino, California

High school girls enjoy the pleasant informality of the afternoon tea and are always willing to work hard to make the affair an artistic as well as a culinary success.

NOT every teacher of home economics has the budgetary allowance, room facilities or the necessity for giving elaborate luncheons or dinners as practical projects for her classes, but it is usually possible, at least once during the school year, to plan and present a student tea. This is an economical project, yet at the same time, it gives the girls all the planning, purchasing, and decorating experience required for more elaborate, expensive affairs, and in addition, offers a splendid opportunity for teaching social etiquette.

Before the class begins to plan the tea, some preliminary study should be made, including the place of the tea in social life, the different types of teas, suggested menus for each type, and the general etiquette of the occasion. Students are quick to appreciate the fact that the social tea is one of the most charming ways to entertain one's friends, and that it can be carried out with a minimum of preparation, space, and expense. Also, it is readily adaptable to almost any type of social gathering or may be used to honor any special guest or gathering.

The students learn, for instance, that the formal tea is a gracious way to entertain a large group of friends or acquaintances during one afternoon. Also the tea may serve any one of many purposes: it may announce an engagement, present a new relative, welcome a new neighbor, honor a house guest or friend or celebrity, welcome a daughter home from college, or greet a traveler. Formal teas, which are more elaborate, may be in the form of a bridge tea, a tea *dansant*, a garden party, a "housewarming" or a studio tea. And most elaborate of all is the high tea or a musicale tea.

The class will probably decide on a less elaborate affair. The next consideration, then, is the planning of details such as decorations and the menu. If it is to be a Christmas tea, seasonal decorations will probably be used, with preference perhaps being given to such new color combinations as royal blue and silver, silver and gold, green and white, or all white, rather than to the time-honored, conventional green and red. A May-day tea can also be made most effective, and has the advantage of being given at a time when spring flowers are plentiful. In any event, there should always be some central theme around which to build the decorations.

The class, after considerable discussion, may decide to give a tea honoring the senior girls who are about to graduate. Since Commencement is in mid-June, the tea may be scheduled for the last Friday in May, and will be held in the living-room of the domestic science apartment. By common consent, it is agreed to use spring flowers for decoration, the centerpiece to consist of Japanese quince, the deep rose color of which will harmonize perfectly with the more delicate rose glassware owned by the department.

The next consideration is the tea-table. Since the living room contains a large library table, it is agreed to use this, spread with a well laundered white cloth, as the department does not possess a more decorative cloth of lace or embroidered linen. If two of the students are willing to contribute the loan of their mother's silver service, these will add much to the beauty and elegance of the table. Rose colored glass candlesticks with lighted candles of pale green may be used to complete the simple decoration of the table.

After lengthy discussion, the menu is decided upon. Cocoa and tea, rather than coffee and tea, may be selected as being more suitable for young girls. The rest of the menu would include small, dainty sandwiches, of both the conventional and open-face type; small wafers and tiny iced cakes; ripe olives spiked with varicolored toothpicks to enable easy handling; cube sugar with silver tongs; razor-thin lemon slices studded with whole cloves; and dainty mints in pink, white, and pale green.

The setting of the table is the next problem to be considered. Books and magazines may be scanned in an attempt to determine the correct and most practicable way of placing the dishes and silverware. Each student should demonstrate or draw a diagram of several different tea tables, setting each correctly with service, dishes, silver, and food. The best demonstration or diagram may be selected as a model to be used for this special occasion.

In any event, a tea service will be placed at either end of the table, neatly flanked with cups and small plates, and with sugar, cream, and lemon. Along one side of the table, the dishes of food are placed, opposite the napkins and the silverware, which is arranged in formal straight line. The total effect will be one of such beauty and simplicity that the girls will probably never forget this important epoch of their life—the setting of their first tea table.

Before the eventful day arrives, a great deal of practice may be necessary to insure routine smoothness. Different students may take turns standing at the door and acting as hostess and as honor guests. Also, they will practice pouring, at either end of the table, with water substituted for tea. Different projects may be assigned to different groups; some may make out a variety of invitations; others may develop original schemes of decoration; others may plan menus for all the different types of teas, working out recipes for each: collections of magazine pictures showing tea tables may be gathered. Also, it is a good plan to have each student report on one special tea of her own devising, such as a George Washington, Fourth of July, May Day, wedding announcement, bon voyage, or birthday tea.

To be of practical and lasting benefit, any sort of tea or other function planned by the class should also include some discussion of the etiquette of the occasion.

For instance, if the invitations specify three o'clock, then every guest should plan to be there promptly. On the other hand, if the invitation reads "from three to five," then a guest may properly arrive at any time within those hours.

A street costume, it may be explained, is the best type to wear to an informal tea, enhanced by a pair of gloves. If a hat is worn, it should not be removed during the afternoon. The guests of honor should wear afternoon dresses, preferably without hats. Also, in accordance with established custom, the hostess should wear an afternoon dress and be hatless.

The senior girl who is elected hostess should stand at the door and receive the guests. Also at the door will be the other seniors who are honor guests. After a few moments' conversation, the guests will gradually move towards the tea table, where lighted candles and beautiful flowers seem to transform the darkened room into a magical bit of fairyland.

Two girls, notable for their charm and poise, may be selected to sit at either end of the table and pour the tea and cocoa. Two other girls, usually underclassmen, act as maids, and remove the used dishes, assist the guests, refill the urns, replenish the sandwich trays and cake plates, always moving quietly and unobtrusively about the room. The serving goes on continuously, as does the easy conversation around the tea table, until all guests have been served and have departed.

The benefits of the student tea are many. The students learn to plan and budget a party that is simple, easy, and yet attractive and "grown up" enough to appeal to all. From this experience, the students can easily adapt themselves to planning a more elaborate affair such as the school board dinner or the lettermen's banquet.

Furthermore, the tea provides excellent training in social etiquette as it gives the students specific training in acting as hostess, in greeting guests, and in being a maid or a guest. They learn how to shake hands, how to converse socially with ease and poise, how to handle food, how to eat properly, and how to take a graceful leave. All of these are good training, for they prepare for real life situations that every girl is sure to meet within a very few years. Thus, most of the social amenities are encompassed within this one experience. And all of these have a direct place in a girl's education, as they are also education for life —the civilized life of educated, cultured people who derive a great deal of genuine pleasure from meeting and greeting friends in charming surroundings under conditions that are socially enjoyable as well as mentally stimulating.

October Meetings

School Lunchroom Directors and Managers. Cleveland, Ohio. October 29th.

This is a new departmental meeting to be held as part of the Northeastern Ohio Teachers' Association, and the first meeting of the new department. The program is as follows:

"Supervision and Organization of the School Lunchroom", by Mary Farnum, of Cleveland Heights, Ohio.

"Underlying Philosophies of Operation of the Lunchroom", by Mary Hemmersbaugh, of Cleveland.

"Administrative and Educational Policies of the School Lunch", by Mary De Garmo Bryan, Teachers Colleg Columbia University, New York.

American Dietetic Association

20th Annual Meeting, Richmond, Virginia. October 17-23. John Marshall Hotel.

An excellent and inspiring program has been planned for this meeting. For further information see September nummer "Journal of The American Dietetic Association".

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Cream soups and sauces made with Irradiated Carnation Milk are noticeably smooth and rich in flavor. Why is this, you may wonder.

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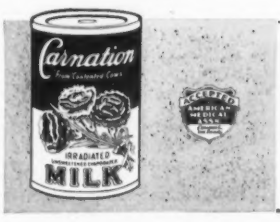

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Streamline Teaching

By Edna E. von Berge
Kiser High School, Dayton, Ohio

"Chug - Chug - Chug - Tinga - linga - Tinga - linga"

As small children we would shout that in unison, lining up along the curb as the one and only neighborhood car would go chugging, snorting, galumping by. Thanks be to constant changes of inventors and manufacturers, we are now able to glide smoothly and easily over rough roads without the fear of false teeth shaking lose; hats being set askew; vertabrae being twisted out of place and nerves set on edge.

The earlier years of teaching are like riding in a "Chug-chug-chug-chug" model, but *Time* and *Experience* in place of the inventor and manufacturer insure a smoother and happier road. Were it not so, the nervous strain of teaching would be intolerable, especially under present teaching conditions when classes are increased in size and number. It is the constant application of new methods to replace the old, that guarantees enjoyability, efficiency and serenity in teaching.

Just as it was impossible in the Model T Ford days to imagine a knee action, balloon tire, radio equipped car, I could not in my earlier days visualize "Snoop", or Magazine days, student demonstrators or dishes rattling to the tune of Wagner and Bach.

Great was my despair after cooking days, to find equipment out of place, until the launching of "Snoop" lessons. During the first ten minutes of a period, organized groups scout around in the dining room, store room, and main laboratory, opening cupboards and drawers and shelves to inspect the contents and order. Unusual gadgets with unusual names and purposes not ordinarily found in homes of students, are displayed on a large table with the use for each explained. This does away with the constant nerve racking "What is this for?" and "What do you call this?" These are later put into their proper places so that the students may learn the location for replacing after use. Following this snooping around, a reliable student conducts a question period asking where this, that or the other object is kept. If a student fails to reveal the correct location, she must either snoop around to find it for the class, or a member of the class comes to the rescue. After a few such lessons, things are usually put into their rightful place after use, and a constant chasing after them because they have been incorrectly placed, is eliminated. After this series when a girl has had sufficient opportunity to learn the equipment, she receives a check against her in the record book if she either asks as to the location of an object, or has been discovered putting it into the wrong place.

Because of the greater freedom in a Home Economics laboratory period in comparison to other more formal recitation periods, in addition to the enthusiasm over the work being done; classes have a tendency to become unnecessarily noisy. A happy solution to this problem was an old college victrola resurrected from the attic and placed along with records on top of a seldom used fireless cooker. If classes work quietly and well the first part of the period, they are permitted to have music during the remainder of the period when they eat the food which has been prepared, and then when the dishes are being washed. Occasionally the radio from the office is borrowed for the same purpose. This system has made me less a policeman, less jittery and more human. I actually find myself frequently quietly humming with the rest of the girls, and for the rest of the day there is a song in my heart.

At the beginning of the semester each girl is presented with a printed list of rules pertaining to the laboratory con-

SPICES, Flavoring Extracts, Baking powder—these and many other ingredients are to be actors behind the scenes. Your patrons do not see them, but they are responsible to a large extent for the success of your performance. You might save a few pennies by trying out this grade, and putting in a little of that—less costly because they are inferior. Actually they are more costly. That's why the bakers play safe and say "Edelweiss." They know Edelweiss baking requisites have a dependable quality—the assurance of success. We stand back of them—doubly in most cases, for we not only guarantee them, we make them.

Sexton Specials offer outstanding values in foods prepared exclusively for those who feed many people each day.

JOHN SEXTON & CO.
CHICAGO — Manufacturing Wholesale Grocers — BROOKLYN
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taining such notices as "Do not leave towels on the pipes to dry. Pin your name to them and hang them neatly on the towel rack—but take them down the following day". "Place all books neatly along the east wall on the floor, not on the desks, windows or stoves during laboratory periods". When any of the rules are not observed, it is necessary to refer a girl to number three, or five or rule seven on the sheet, without having to naggingly repeat it.

With six classes a day, and only twenty-five minutes for lunch, routine work becomes an additional burden. Here again reliable students may assume the responsibility. They love it, and at the same time have valuable experience. A class secretary takes daily attendance, collects and returns all absence notes to be signed by the teacher; and makes any class announcements jotted down by the teacher on a pad kept on hand for that purpose. Two bankers collect and record all money collected from the members of the class for the purchase of groceries; total the amount, place it in an envelope indicating the amount collected ready for the teacher to make her purchases. It is surprising how well students can accept such responsibilities even in the seventh and eighth grades. Two girls of each class check the desk equipment, stoves and sinks at the end of a laboratory period and record on the board the name of any girl who has not satisfactorily completed her duties. When it has been remedied the name is erased from the board. To check over six classes a day, with six units in each is quite an additional burden for the teacher.

It is impossible to have all groups complete their work at the same time especially on cooking days, so that extra moments near the end of the period will find students without any work. To avoid wasting this time and to keep the girls quiet and in order, they are permitted to select magazines from the rack in the front of the room. A girl in charge sees that they are loaned, returned and arranged in good order at the close of the period. Special magazine days are often set aside for reports in class, and these hold great appeal because they are home economics in nature, and because many of the students have few magazines at home.

When there is occasion for making announcements sent from the office, or to call the class together for a short demonstration, it is awkward and difficult to be heard above the noise of whirling egg beaters and metal spoons banging against the sides of pans. A small ten cent hand bell quickly calls the class to attention. Girls soon learn to know the purpose of that bell and immediately stop all noise and work. It does away with shouting or the clapping of hands for attention, thus saving the voice, dignity and frayed nerves of the teacher.

Inventing these teaching "gadgets" and applying, them, has put me into the streamline class, able to ride smoothly, serenely and gayly along, less easily upset and grouchy and a more normal human pal-like teacher.

A Correction

The following correction should be made in the listing for ARMOUR AND COMPANY in our September issue.

b. *The Meat You Buy*—a 16-page educational leaflet on buying fresh meats; production, inspection, grading, cuts, uses. Specify quantity desired.

Attention: Clip Your Coupons Or—

If you do not wish to mar your copy of Practical Home Economics by clipping the coupons on the advertisements, write to the manufacturer instead, mentioning that you saw the advertisement in Practical Home Economics. Many companies have special material that is available for teachers and you may make sure of getting this by mentioning the advertisement and the issue in which it is published.

—from

TABLE ETIQUETTE

A Portfolio of Plates

Beth Bailey McLean

A portfolio of enlarged illustrations taken from *Meal Planning and Table Service* showing the correct way to eat food and drink beverages. Reading the rules on how to handle your knife and fork, for instance, is not nearly so well remembered as seeing an illustration of the correct way. For use wherever foods is taught, as well as wherever table etiquette is given attention as a class subject. Order this portfolio and other books today.

Table Etiquette	1.80
Meal Planning and Table Service	2.00
Cookies and More Cookies	1.75
Tables of Food Values	2.00
Candy and Candyy Making	2.25
Bacteriology of the Home	2.25
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Good Taste in Dress	1.00
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Home Arts In The Integrated Program

(Continued from page 355)

predict the exact time at the beginning of the term. For the same reason it is not possible to follow a prescribed course of study.

Objection is sometimes raised to the added expense involved in carrying out this type of program. Until the administrators are convinced of the value to the pupils of these activities the most practical solution to the small budget is to raise additional funds by means of sales of various kinds. Insufficient equipment too is often a problem. Even though the school lacks a foods laboratory, the ingenious teacher can secure simple equipment. An electric plate and a few cooking utensils in the classroom will suffice for many interesting lessons.

The objections of the classroom teacher to this type of program presents another obstacle. In many instances the first reaction is resentment toward "carrying a heavier load." She feels that home arts has been added to an already overcrowded program without relieving her of any of her many responsibilities. She fails to see that through home arts she may more effectively teach her "Readin', 'rit-in' 'rithmetic." It takes patience and tact to change this attitude. The most effective way to overcome this objection is to enlist the aid of the teacher with vision who sees the possibilities in home arts. Even in the most conservative school one can usually find a teacher who is willing to venture into new fields. The successful completion of a unit in which the classroom and home arts teachers have worked together is convincing proof that home arts is a help rather than a burden.

Sometimes this type of work has been criticized from the standpoint of its lack of organization and failure to emphasize essentials. In order to avoid this pitfall, the home arts teacher should have in mind a definite conception of the habits, attitudes and skills that she wishes each child to develop. Since authorities agree that health habits are more readily formed in the elementary school, nutrition and health should be considered an essential part in the education of every child. Lessons in nutrition and health are frequently a natural outgrowth of the unit under consideration and may be emphasized as the opportunity arises.

While the integrated program is still in the experimental stage we feel that it affords greater opportunity for the fullest development of the child. It aids pupils to acquire some of the habits, attitudes and knowledges conducive to health; it stimulates an interest in home activities which will make them happy and helpful members of their present homes; it develops in the pupil an ability to express himself creatively through some home activities; it creates situations which call for good team play, for meeting responsibility, for bearing fair share in a group endeavor and for carrying a project through to completion; it increases the pupil's knowledge about the materials used in everyday life, their sources and values; and awakens interest in ways of living other than our own.

(A second article in this series will be published in November.)

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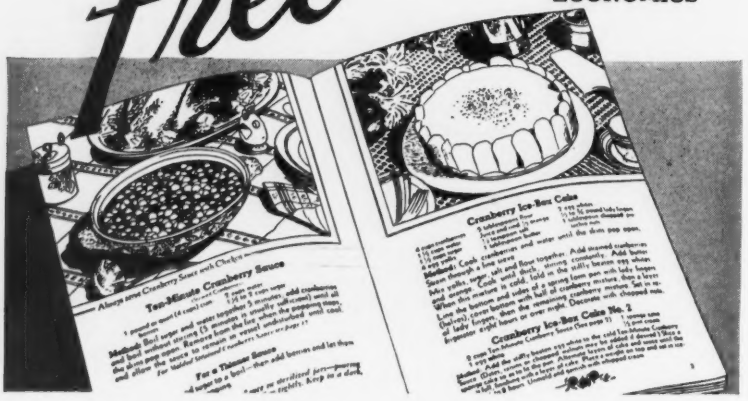

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The Child Centered Cafeteria

(Continued from page 367)

all paper to a waste basket, and put their milk bottles in the empty milk crates provided. This saves a great deal of time for the child helper who receives these soiled trays, cleans all refuse from them and sorts the dishes for the second child helper who washes them. A third child dries and puts away dishes. Everything has a definite place and each job must be done according to the highest standards.

All told, there are nine student helpers, chiefly fifth and sixth graders, who work for one month each but who may work at various jobs during that time according to where they work out to best advantage. Changes in student personnel are made each week so never does an

entirely new crew need be worked in at any one time. With this amount of help the dietitian is left free to refill steam table containers and to supervise the workers so that their experience can be made as educational as possible. All student helpers work one hour and receive the equivalent of 15c but must take one of the unit lunches. Lunches for helpers must be ordered at 9 A.M. just as if they paid for them in order to insure their receiving the same quality and choice of foods.

Since there is no compulsion about the work there are no complaints. Children want to work, they know there is a long waiting list of volunteer workers and they know, too, that once they are selected and have accepted the responsibility they are required to carry on for the full month unless there is some real reason for not doing so. This is part of their education, accepting responsibility and carrying through. (Character development receives greater emphasis in the Eggertsville School than does scholarship.) Children are taught to deal with the public (their school mates, parents and teachers), to be neat, clean and sanitary about their jobs (no child is allowed on duty with a cold), and to be reliable helpers. The cafeteria provides a real life situation and the lessons learned here are far more important than the few hours of academic subjects that they may miss during the year. Though the children may be out of the classroom from a half hour to fifty minutes, they are not excused from this academic work.

The cafeteria is now run on enough of a profit to pay all expenses including the dietitian's salary and to purchase some much needed equipment. To insure the return of any profit to the children it is possible to give larger servings or give special premiums on particular occasions. This Easter each child who purchased a unit lunch was given a colored egg while each child who bought *a la carte* received a bunny cookie.

What has been accomplished here is not phenomenal and can be accomplished any place where all concerned are willing to expend a great deal of forethought and effort in planning and an equal amount of effort in follow-up and cooperation. The effort expended has its rewards in a child-centered cafeteria where children pay but little, secure balanced meals of good quality food prepared and served in a most sanitary manner, receive speedy and courteous service, are not tempted with foods they should not have, eat in a pleasant atmosphere, are experiencing life situations in public eating places as consumers, are finding out to some extent what relationships should exist between employer and employee and employee and the public, and many other educational experiences too numerous to mention.

How Do You Use the Educational Listing?

An annual feature of our September number is the list of commercial illustrative material—useful teaching aids in homemaking education. This year the list is larger and better than ever. Every year we fill thousands of requests for these items and each year the response is more enthusiastic. Many of you have been making use of this material year after year; many are using it for the first time. Some, alas, will be disappointed because they did not follow directions.

Once you have the material, what do you do with it, how do you use it? We are interested in knowing what method of using it you have found most effective; how you file it; what your general plan of procedure is; what suggestions you may have for improving this service.

For the best letter received before January 15th, 1938, on this subject, we will pay $15.00; for the second best, $10.00, and for the third, $5.00. Prize winning letters will be published in the March, 1938, issue of PRACTICAL HOME ECONOMICS. Address your letters to The Editor, Practical Home Economics, 468 Fourth Avenue, New York.

BRAND-NEW KIND OF YEAST MAKES BETTER BREAD

Gives Fast Action—Keeps for Weeks without Refrigeration

AT LAST! Here's a new form of dry yeast which keeps for weeks, yet is fast. It will help your students to make *better* bread, with a different but delicious flavor. It's utterly different from anything you've ever seen—in its appearance and in the finer flavor it imparts to baking.

MACA YEAST is ready for quick action whenever you decide to bake. It's a dry yeast, keeping fresh and active for weeks in any cool dry place. It does *not* require refrigeration.

MACA YEAST is *all* yeast and a new *kind* of yeast; that's why a new sensation in flavor awaits you. If you've made bread and considered it had fine flavor and texture, just try MACA once and see if there's anything to equal it.

Thousands of Home Economists, Domestic Science Teachers and housewives have tested MACA YEAST in their own kitchens. You should see the enthusiastic letters that came pouring in with such reports as these: *"Never before baked such grand bread in such a short time." . . . "Finest-flavored, smoothest-textured bread I've ever baked." . . . "The whole class was delighted."*

Try this amazing new yeast right away. You'll want to tell your students about it too. You can get MACA YEAST in some grocery stores. But your grocer will order it on your request if he hasn't it in stock. If you want to try MACA before you buy —send the coupon *now*.

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1750 N. Ashland Avenue, Chicago, Ill.
Please send me FREE and POSTPAID a package of Maca Yeast.

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Care of The Growing Infant

(Continued from page 365)

always, his experience should again be left-right.

16. Baby's bed must have a level, flat, firm mattress, with absolutely no bumps and no possibility of any kind of a hollow. This makes control of his sleeping position a simple matter. It is absolutely impossible to control his position if the bed is hollow down the middle and the margins are higher.

17. The best baby's bed has solid wooden ends and sides made of slats. The sides may be lowered for conveniently caring for him.

18. One long side of the bed should be pushed up to a dead wall, where there are no windows, no pictures and nothing to attract his attention.

19. Baby will look out to the room when he is awake. If mother always lays him down with his head at her left hand he will always lie on his right ear when he is awake, and shorten his right side,—so we

20. Change the head of the bed every week. Do not move the bed. Make it up with the head at the other end, change every week.

21. Do not help baby to sit up. Be patient, he will grow to sit up. His own efforts will do him more good than our assistance can ever give him. His continuous efforts develop strong front and back muscles so necessary in good body balance even from the very beginning.

22. Begin at two months of age to lay baby on his stomach on a solid table a few moments every morning and again every afternoon. Increase the time gradually.

23. When he is four months old lay him on his stomach on the floor, on a clean sheet or blanket for ten minutes every morning and again every afternoon. Increase the time gradually.

24. Put a toy ahead of him. He will make the effort to get, maybe not the first day but very soon he will make the effort, and so begin creeping.

25. Creeping prepares the muscles for walking and should continue a long time.

26. Let baby pull himself up to standing position. Do not help him. Let him grow to stand. It is far more interesting than helping him before his nervous system has made the connections necessary for standing. Let him try alone. He will squat down suddenly, but that is part of it and thus he does not tire his own legs as we would for him if we did the supporting. His periods of standing are shorter, and his efforts to get up exercise his muscles too. Let him grow to stand.

27. Never, never help baby to walk. Let him learn through trial and error. He will be stronger through his own efforts. His posture or body mechanics will be better if he is not forced. Let him grow to walk.

28. Do not use a pen, or play yard. It offers too much arm work and not enough use of back and leg muscles.

29. Do not use a canvas table. It is not steady. It sags in the middle.

30. Do not use a canvas or rubber bathinette. Either is insecure. Use a solid tub.

31. Do not use a baby-walker and do not use a kiddy-car while baby is learning to walk. He often uses his feet as paddles only, and the wrong positions flatten his feet which also have very new untried muscles and soft bones.

32. Ideally baby should not wear either stockings or shoes for a long time. The reason is that his feet develop much better if he is free to move his toes about. He will, too, if his feet are free and uncovered. Soft woolen bootees are nice to keep his feet warm during the coldest weather only. Save the money which could be spent for pen or play yard or tiny shoes and buy baby the very best pair of shoes the market offers when he himself decides to walk.

Each direction or suggestion has been carefully thought out and put into practice with thousands of babies. Mothers are beginning to understand the responsibility is theirs, and they welcome the suggestions for environmental control of baby's developing posture.

Light and fluffy — or smooth and flaky —

BISCUITS TASTE BETTER MADE WITH NEW *super-creamed* CRISCO

What a variety of interesting things you can make with biscuit dough . . . what a lot of ways there are to disguise this most popular of "quick breads."

Cinnamon twists, cheese snacks, chicken shortcakes, hamburg-and-biscuit sandwiches, cherry rolls, for example.

Whether you prefer them light and fluffy or smooth and flaky, biscuits taste better when made with the new *super-creamed* Crisco.

You'll like Crisco for biscuit doughs. This pure vegetable shortening is easily workable at room temperatures. It stays fresh and sweet without refrigeration. And its flavor is bland.

Methods for preparing a wide variety of biscuit doughs are contained in "Quick Breads," one of a series of 12 Manuals which are available, at no cost, to teachers for use in their foods classes. Send for a sample set. They'll come to you with an order blank with which you may order a sufficient number for your students. Address your request to

PROCTER & GAMBLE

Home Economics Dept. PH-1037

IVORYDALE, OHIO

The Story of Lighting

(Continued from page 357)

ing became at all common and the picturesque but humble figure of the weary lamplighter came into his own. Before that, street-lighting was not a public service or enterprise but was done entirely by individuals sufficiently adventurous to be abroad at night. People who were brave enough to stir away from their own doorsills went as a rule either by litter or by sedan-chair, preceded and in many cases followed by their own torchbearers. This practice continued until quite recent times. It is said that there are still in existence in certain old cities of Europe, houses that have at the entrances racks used to hold the torches until the visitors returned home.

In the London of Queen Anne's day it was entirely unsafe to trust to the feeble illumination from house windows. A ruthless class of vagabonds and criminals operated by night, and a journey across the city was a hazardous adventure. Little boys could be called to light people to their destinations, just as we today might call a taxicab. These boys were known as "link boys" and for a few pence performed a real service. Occasionally smoky oil lamps were hung on ropes across the street, just making "the darkness visible" for those who ventured out.

Not that people did not want light, especially in connection with their amusements, for night was naturally the time of leisure. Due to the dangers of night travel, as well as the inadequate interior lighting arrangements available, nothing much in the way of amusement could be arranged. Theatrical performances were generally given in the afternoon, but always in daylight, for other than the dim, religious light obtainable from candles and torches, there was nothing to serve the purpose, and these were useless for large-scale illumination. Because of the absence of light, the logical procedure was to give performances out of doors or at least in semi-open places. In Shakespeare's time, when night fell, pitch blackness fell with it, with never a street lamp to shed a ray upon the road. People who had to go about at night had to take their own torches or lanterns with them. Therefore in a play acted in broad daylight, a character would bring on a lighted torch to indicate to the audience that the scene was supposed to take place at night.

Perhaps to the theatre can be attributed our present symbolic interpretations of the qualities of light. The producers of plays in Italy at the time of the Renaissance recognized the symbolism of lighting, and knew that many of their effects must depend upon the judicious placing of lamps or candles. They illuminated fully those scenes in a play in which the subject-matter was happy; and when in a tragedy the first unhappy situation occurred, the lights were dimmed to induce a melancholy or at least a pensive and serious state of mind in the beholder.

More and more is light assuming both decorative and psychological importance. That it has great power to affect one's moods needs hardly to be demonstrated. Moonlight, firelight, rosy dawn, the veiled light of a rainy day, the steady, low light of a museum, the white lights of a great city, all affect us differently, evoking various and characteristic sentiments. Just as we would grow obtuse to any one *natural* light without change or variation, so too, artificial light may now be largely arranged to suit one's varying moods. Travelers who visit the land of the midnight sun tell us that the Scandinavians have a serious, dejected, heavy attitude toward life due to the monotony of unending nights and unchanging days. Climate we cannot change, but with the flexibility and efficiency of modern lighting we may nowadays obtain in every room at least two different lighting effects in order that unlike moods and circumstances may have their proper expression. Lighting is no longer merely an expedient. Today we give ourselves to those broader applications of it that yield the restfulness and peace that come with safety and protection.

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Stimulating Home Sewing

A Cooperative Project Now Being Tried Out in San Francisco Schools

AN interesting plan has been worked out and is now under way in San Francisco to stimulate interest in home sewing through cooperation of sewing teachers, manufacturers and department stores. It is the outgrowth of a plan suggested by a committee of the National Retail Dry Goods Association, who were appointed in June, 1936, to study ways and means of promoting piece goods business by increasing interest in home sewing, and is under the supervision of the Sewing Institute, a non-profit organization whose officers are: president, Frederick W. Howe, Pratt Institute, Brooklyn, New York; vice president, H. H. Benington, L. Bamberger & Co., Newark, New Jersey; secretary-treasurer, H. A. Hey, Singer Sewing Machine Company, New York.

Although financed through the joint efforts of five leading San Francisco department stores and a group of manufacturers of home sewing supplies, the plan is not intended as a commercial promotion of any particular merchandise, but as "a basic educational movement to broaden the market by increasing the number of women and girls who sew". It is conducted entirely apart from any of the stores or from any other direct commercial affiliation. Miss Frances Henry is in charge of the plan in San Francisco.

As a means of carrying out the plan, the Sewing Institute has set up the following objectives:

(1) To increase the number of home sewers by means of educational promotion with these groups:

a. Pupils in the public schools.
b. Adult students in evening and continuation classes.
c. Youth organizations; i.e., Campfire Girls, Girl Scouts.
d. Women's and Girls' Clubs.

(2) To stimulate the public school sewing teachers to do a more efficient teaching job.

(3) To encourage local dressmakers to higher standards and aid them in developing a truly professional group.

(4) To supplement and advertise the educational program by means of publicity through newspaper, radio programs, promotions in local stores, etc.

The school program applies to the junior and senior high schools and has as its general aim: "to make sewing, as a means of achieving smart, becoming clothes, so attractive to these groups, that their interest will continue throughout their course and into adult life; also through the enthusiasm of these groups, to interest additional pupils to elect sewing in the higher grades."

In order to carry this out successfully, the Sewing Institute planned a course of study for teachers as well as pupils—courses worked out with the director of home economics in San Francisco and leading educators in the Bay region. Such a course (for teachers) includes the newer aspects of home economics as applied to sewing classes, new methods of class presentation, use of illustrative material as a teaching device with special emphasis on style and the inculcation of smartness into home sewing. This course is to be presented under the auspices of the Extension Division of the University of California Evening Class and so will have educational credit value. In San Francisco, teachers are required to earn additional credits periodically and such a class offers a means of meeting this requirement.

A laboratory course in professional sewing techniques and methods for teachers is also part of the plan of the Sewing Institute, and is to be given on Saturday mornings. This includes the principles of design for individual types; fitting, especially to achieve style; pressing; decoration finishes, etc. These classes are to be given by a professional dressmaker of high standing and are to be self-supporting by means of the fee charged.

In carrying out the details of the plan the Sewing Institute aims to help teachers by providing or suggesting material for textile exhibits, special demonstrations and up-to-date fashion services for classroom work.

For adult evening classes the same general type of promotions suggested above for the regular day classes are applicable to the adult evening classes, which are a part of the public school program. The lack of uniformity in the previous training of the women who constitute these groups and in the types of garments made makes it especially important that they be given all the inspirational and practical aid possible. The presentation of demonstrations and other illustrative material will be adapted to the groups which doubtless vary in different parts of the city.

The results of this plan are well worth watching and we hope to be able to report on them from time to time. Certainly sewing should have a new meaning in San Francisco schools and homes by the end of the year.

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Clothing Selection In a Liberal Arts College

(Continued from page 351)

inventories had shown that members of the class spent from ninety to nine hundred dollars for wearing apparel and its upkeep, with figures from three hundred to three hundred and fifty dollars being most usual. The ensembles chosen ranged from fifty to sixty-five dollars.

For the blond, the committee selected a medium blue, three piece, wool suit, Dubonnet acetate silk sports dress, Dubonnet blouse, navy hat with Dubonnet streamer, navy patent leather bag, navy gloves and shoes, and Dubonnet handkerchiefs. For the medium blond, the group chose a navy sheer dress stitched in red, with white lingerie collar, a grey wool, semi-fitted coat, and navy accessories with multi-colored bracelet, bag, and hat trimming. For the brunette, the girls preferred a yellow flannel skirt and linen blouse, with saddle-brown jacket, brown Harris tweed sport coat, and lively, reddish brown accessories.

The next morning the class discussed which of the ensembles, which had been put in the show window the previous evening, would give the greatest satisfaction, which collection would make the most different costumes, etc.

"Travel Togs"

As the home economics department gave a style show of "travel togs" for a May party, a rehearsal was given at the regular class period of the beginning clothing class. Three of the models had completed plans for going abroad during the summer. All wore costumes which they or friends in the community had worn, or would wear, while travelling.

Attractive, non-crushable woolen dresses, suits, and coats for boat wear first appeared on the stage, which was decorated with luggage covered with foreign labels. Some light-colored knitted dresses suitable for cruises and a white terry cloth beach robe with navy silk belt were modeled. A chic, black silk jersey dress was shown with sport accessories, which were exchanged on the stage for dressy accessories. Printed silk crepes were shown for daytime and dinner wear.

Of course, chiffon and lace appeared in formals. A quilted velvet cape and a mandarin coat illustrated suitable types of evening wraps.

A semi-fitted, numeral print travel robe, of "guaranteed to be non-crushable" rayon was worn with an ascot to show that it was also a house coat, suitable for receiving guests in one's Paris studio.

Infant's Layette

An attractive and highly trained instructor from the Hillsdale County Health Department exhibited a model infant's layette, and talked to the class about clothing and supplies for new babies. After giving each student a leaflet listing the articles needed, she showed attractive examples of infant's wear and discussed the principles involved.

She advised opening dresses and "Gertrudes" all the way down the back, and explained the advantage of using short sacques instead of kimonos. She showed how bands and pads can be made most economically, and demonstrated correct folding of diapers. She left a complete set of pink tissue paper patterns for infant's apparel, including a design for shoes which will not come off.

Several weeks later, the home economics and health departments cooperated in arranging a downtown window display of the baby's bed, apparel, and supplies. This included dresses, shoes, baby buntings, and even a knitted "soaker", which had been made by college clothing students.

Conclusions

The learning activities in clothing selection which have been described above, have several characteristics of progressive education. They originated in the interests of the students. They were given at the natural time. For instance, a student wanting a garment would investigate the quality and price of the ready made article before figuring on making it, which is just what the class did in regard to blouses, ensembles, and infants' wear. The projects were carried on in their natural setting: e.g., buying was studied in stores.

Preparation for, and recapitulation of, the learning activity by discussion was usual.

Exhibits were helpful as culminating activities, in that the discussion which they invariably created, served to fix in mind the principles illustrated.

The friendly co-operation with persons, establishments, and agencies in the community was educational. Merchants felt encouraged to learn that young women were interested in the good qualities of their merchandise, and students were gratified to learn how much information would be furnished them for the asking.

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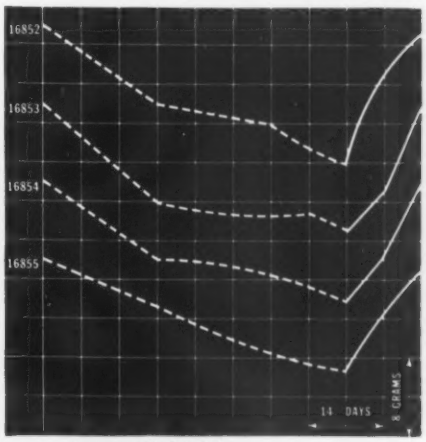

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A Study In Bath Towels

(Continued from page 364)

stores, and third, consumer demand by organized groups who have studied the problems and will spend the time and effort necessary to bring the matter to the attention of responsible authorities. There is much that the classroom student can do in addition to studying the material in this report. Secure old bath towels and draw out the pile yarns, studying their construction and the type of weave used. Count the yarns in the selvedge and find out what kind of a yarn is used in the edge. Pull the material to see how easily you can make holes like those in *Illustration 3.* Invite the head of a local store or the head of the domestic department to visit your laboratory and see the results of your analysis. Ask him to tell you what method he uses in choosing the goods he sells in his department. Find out if regular stock is sold at special sales or if special goods are brought in to the store for the occasion. Find out if the stores in your town sell "seconds" in bath towels. Ask the buyer what defects are found in seconds. Are the seconds sold under trade names? Are the first quality towels sold under trade names?

In making classroom analysis of towels it is necessary to secure as large a variety of qualities as possible in order to be sure you can tell how yarn count and size increase with durability. Measure as many towels as possible to see how many are standard in size. When you see a sale of towels advertised go to the store and see if the size is marked on the towel. If possible secure permission to measure ten or a dozen towels.

See if there are labels on the towels. What *facts* do the labels furnish.

Prepare posters giving facts you have found about the towels you have studied. Prepare illustrations showing samples of towels with pile and the background with pile removed. Invite your mothers to see the results of your work. Invite any organization which you think would be interested in working for better buying methods. Prepare a list of the facts you think should be available to the consumer buying towels.

Dyer, Elizabeth, "Textile Fabrics," Houghton Mifflin Co., Boston, Mass.

Johnson, George H., "Textile Fabrics," Harper and Brothers, New York City.

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